5 636.05 LIOM Aug. 1974

STATE OF MONTANA

DEPARTMENT OF LIVESTOCK

Animal Health Division



Helena, Montana 59601

AUGUST

MONTHLY LETTER

1974

BOARD OF LIVESTOCK

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Administrator and State Veterinarian



MONTANA DEPARTMENT OF LIVESTOCK

Animal Health Division Helena, Montana 59601

MONTHLY LETTER - AUGUST, 1974

BOARD OF LIVESTOCK REMOVES DEPUTY APPOINTMENTS

The Board of Livestock in its official capacity as Director, Department of Livestock, acted July 30, 1974 to remove Deputy State Veterinarian appointments from two Montana veterinarians.

In the first case, the appointment was revoked for eighteen months because a Montana practitioner had permitted unauthorized use of official documents, namely official health certificates, which are the property of the Department of Livestock. The second case, involved the use of official documents in reporting Brucellosis Strain 19 vaccination done by other than the veterinarian and in which case the deputyship of the Montana practitioner was suspended for sixty days.

Only those Montana veterinarians with Deputy State Veterinarian appointments are permitted to use official department forms.

The Board of Livestock, as evidenced by this recent action, is concerned that high professional standards be maintained by practioners who also serve as Deputy State Veterinarians both in the use of official forms and in the performance of official acts. It is expected that the Board will act strongly against future derelictions of duty in order that the livestock industry of the state might be better served.

REGIONAL (INTERNATIONAL) SYLVATIC RABIES CONFERENCE

Three departments of state government of Montana are sponsoring a regional conference on rabies in Billings September 17, 18 and 19, 1974, at the Ramada Inn. Emphasis will be on skunk rabies as a problem in the Northern Plains of the U.S. and adjoining Canadian provinces.

The conference program agenda provides panel deliberations in four areas:

- (1) State and province programs now in existence;
- (2) Population controls now available and anticipated;
- (3) Renewed research goals and regional research approaches;
- (4) Organization of a regional commission or authority for skunk rabies research and control.

Panel participants will include representatives from wildlife, public health and animal health agencies of state, provincial and federal government as well as E.P.A. and H.E.W. States and provinces participating in panels and in regional organization will be Alberta, Colorado, Iowa, Manitoba, Minnesota, Montana, Nebraska, North Dakota, Saskatchewan, South Dakota and Wyoming.

This conference will be open to public attendance. Monitoring by veterinarians, university students, public health officials, county commissioners, city officials and all other segments of public service with interests in the skunk rabies problem is solicited and encouraged.

The subject matter included in this conference as planned by the Montana Departments of Fish and Game, Livestock and Health and Environmental Sciences will provide the participants and public a complete review of the skunk rabies problem in the region and concepts for a new approach to research and methodology for control.

It is hoped Montana veterinarians and those veterinarians of the region will plan to attend this conference and be benefited by the technical knowledge that the deliberations will provide.

NO EQUINE ENCEPHALITIS CASES TO DATE

During the months of June and July, which were months of very high mosquito population in Montana, no cases of Equine Encephalitis were laboratory diagnosed. To date, specimens from eleven equine cases have been submitted for diagnostic determination. The most recent reports on "sleepers" support the veterinarian's field diagnosis of encephalitis, but laboratory results are not yet available.

Historically, August has been the month of peak occurrence of equine encephalitis in Montana. It is important that any "sleeping sickness" cases be reported to the Animal Health Division office in Helena by telephone so that dianostic measures can be arranged at VSDL, Ames, Iowa. Such procedures facilitate rapid transporatation and laboratory consideration of the specimens for all encephalitides including VEE. To date, no cases of VEE have been diagnosed in equines in the U.S. since late 1971.

REVISED RECOMMENDATION - ANIMAL RABIES VACCINATION

A revision of the 1972 recommendations for animal rabies vaccination has been received and is herein reproduced for guidance to Montana veterinarians. The information contained in the following review becomes the official recommendations of the Animal Health Division, Department of Livestock for compliance with Deptment rules on rabies vaccination of dogs and cats.

"May 1974

REVISED NATIONAL RECOMMENDATIONS FOR ANIMAL RABIES VACCINATION

This is the first revision of the Compendium of Animal Rabies Vaccines developed in 1971-1972 by the Rabies Subcommittee, Animal Health Committee, National Research Council-National Academy of Sciences (NRC-NAS)* and initially published in 1972. The revised compendium represents the Center for Disease Control's recommendations on animal rabies vaccinations. At the request of the Compendium

Review Committee,** the revised recommendations have been reviewed by the Rabies Committee of the U.S. Animal Health Association, and the Association of State and Territorial Public Health Veterinarians.

The purpose of the compendium is to provide information on rabies vaccines to practicing veterinarians, public health officials, and others concerned with rabies control. Ultimately this compendium should serve as a basis for standardization of animal rabies vaccination throughout the United States.

Revisions in the compendium include 2 new areas frequently of concern to persons charged with the responsibility for rabies control: the selection of vaccine for use in vaccinating wildlife, and evaluation of hazards following human exposure to animals rabies vaccines.

No vaccine is currently licensed for the vaccination of wildlife in the United States, and data on efficacy and duration of immunity are generally lacking. In the event it is necessary to vaccinate wild animals, only INACTIVATED vaccines should be used (some MLV vaccines may actually induce rabies in wild animals). In the absence of specific data, dosage and duration of immunity should be based on the recommendations for vaccination of dogs.

Accidental inoculation or other forms of exposure may occur to individuals administering animal rabies vaccines. Such exposures to inactivated vaccines constitute no known rabies hazard. Based on years of empirical observations, the LEP-and HEP-type live virus vaccines also appear to constitute no rabies hazard. However, available data on human exposure to ERA vaccine are inadequate. Preliminary results obtained from animal studies suggest that this virus may be no more pathogenic for man than the LEP virus, but further study is needed. In the event of exposure to ERA virus, public health officials should be contacted for specific recommendations.

*(Members of the NRC-NAS Rabies Subcommittee include Peter Kennedy, D.V.M., Chairman, Victor Cabasso, Ph.D., David Davis, Ph.D., R. Keith Sikes, D.V.M., and Charles York, D.V.M.)

**(Members of the Compendium Review Committee include W. G. Winkler, D.V.M., Chairman, Melvin K. Abelseth, D.V.M., R. Keith Sikes, D.V.M., R. C. Stewart, Ph.D., and A. L. Strating, D.V.M.)"

See chart on Compendium of Animal Rabies Vaccine in the U.S. on Page 5.

NEW DEPUTY STATE VETERINARIAN APPOINTMENTS

F. H. Houle, D.V.M.
John H. Leeds, D.V.M.
Thomas M. Williams, D.V.M.
Michael K. Stevens, D.V.M.
Robert D. Walton, D.V.M.
Robert S. Syvrud, D.V.M.
Thomas W. Pearson, D.V.M.
Norman L. Shatto, D.V.M.
John A. Wilson, Jr., D.V.M.
James G. Tooke, D.V.M.

Helena, MT Belt, MT Dillon, MT Billings, MT Williston, ND Polson, MT Great Falls, MT Missoula, MT Sheridan, WY Sidney, MT Brian L. Jones, D.V.M. Robert B. Sager, D.V.M. Anaconda, MT Missoula, MT

STATE VETERINARIANS, ADDRESSES AND TELEPHONE NUMBERS

In the "For Your Information" section of this Newsletter, a current list of the names of state veterinarians, their complete address and office telephone number is provided. This ready reference should enhance the opportunity for Montana veterinarians to contact state officials on questions of interstate shipments. More importantly, it is a ready source for office use for prompt forwarding of completed health certificate copies to the destination state veterinarians.

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COMPENDIUM OF ANIMAL RABIES VACCINE IN THE U.S.

VACCINE	COMPANIES	FOR	REGIMEN RECOMMENDED FOR PRIMARY IMMUNIZATION		REVACCINATION	
***************************************	MARKETING	IN	DOSE(S)	ANIMAL'S AGE	ROUTE	RECOMMENDED
Modified Live Virus Vaccines (MLV) Chick Embryo Origin	FROMM (Rehold)	Dogs	1 dose of 1 ml,	3:4 mos.* & 1 yr.	1M	3 yrs
Low Egg Passage (LEP), Flory (LL)	AMERLAB (Rabies Vaccine)	Degs	1 dose of 2 ml,	3 4 mas,* & 1 yr.	IM	Diyes.
	(Dogs	1 dose of 1 ml,	3.4 mos,* & 1 yr.	IM	3 yrs.
Tissun Gulturn Origin Ganine Kidney, High Ega Passage	NORDEN (Endurall-R)	Cats	1 dose of 1 ml.	3 4 mos,	IM	151.
	(Cattle	2 doses of 1 ml, each 6 wks, apart	ns required	IM	1 yr.
	7	Dogs	1 dose of 2 ml.	3.4 mos.* & 1 yr.	IM	3 yrs.
	JEN-SAL	Cats	1 dosn of 2 ml.	3-4 mos.	IM	2 yrs.
Porcine Kidnay (ERA)	(ERA)	Cattle	1 dose of 2 ml.	4 mos.	IM	4 yrs.
	(ERA)	Horses	1 dose of 2 ml,	4 mos.	IM	2 yrs.
		Sheep and Goats	1 dose of 2 ml.	4 mos.	IM	1 yr.
i) Inactivated Vaccines Tissue Culture Origin Prumary Hamster Kidney	JEN-SAL (Rabies Vaccine)	Dogs	2 doses of 2 mi. ea.	1st dosa at 3-4 mos, 2nd dosa 3 4 wks. later	IM	1 yr.
(Cond Virus)	BIOTEC (BioRab or Anegen-R)	Cats	2 doses of 1 ml, ee.	Same as for dogs	IM	1 yr.
Tissun Origin Caprine, Nervous Tissue	BANDY (Rables	Dogs	1 dosa of 2 ml.	3-4 mos.	IM	1 yr.
(Fixed Virus)	Vaccine)	Cats	1 dose of 2 ml.	3-4 mos.	IM	1 yr.
Suckting Mouse Brain	DOUGLAS (SMBV) FT. DOOGE	Dogs	1 dosa of 1 ml,	3-4 mos.	IM	1 yr,
(Fixed Virus)	(Trimune) HAVER- LOCKHART (Murigen)	Cats	1 dose of 1 ml,	3-4 mos.	IM	1 Vr.

^{*}In mass vaccination programs the schedule of primary immunization may consist of only 1 inoculation given each year to all dogs between 3 months and 1 year of age.



DIAGNOSTIC LABORATORY REPORT June, 1974

A. BOVINE --- 109 Specimens Submitted DIAGNOSIS: LABORATORY

NAME	AMOUNT	
Abscess - Liver		1
Acetonemia - Ketosis		1
Bact - Brucella Abortus		1
Bronchopneumonia		1
BVD Virus		9
Diarrhea		3
Diarrhea - Neonatal		9 3 2 1
Emaciation		1
Heart Failure		1
IBR Virus		8
Incomplete Mastitis		19 1
Mastitis - Coliform		i
Mastitis - Staphyloccus		6
Meningitis		1
Metritis		i
Mineral Imbalance		2
Myositis		ī
Nephritis		i
No Diagnosis		10
Normal Animal Tissue		1
Paired Samples Not Submt		16
Parasitism		1
P13 Virus		3
Pneumonia - Inhalation		1
Septicemia		1
Sero - Leptospirosis		1
Specimen Unsuitable		1
Stillborn		1
Thrombo-Embolic-Meningoenic. Tox - Lead		
Trichomonas Foetus		3 1
Trichomoniasis		6
Undetermined		44
Vas Deferaus		1
Vibriosis		2
	TOTAL	155

BACTERIOLOGY: RESULTS

NAME AMOUNT	
Bact - Bacillus Sp. Bact - Brucella Abortus Bact - Cl-Perfringens Bact - Cl-Sp. Bact - Cory. Sp.	3 1 1 3 2

Bact - E. Coli Bact - Hemophilis Suis Bact - Past-Sp. Bact - Proteus Sp. Bact - Staph. Aureus Bact - Staph. Species Bact - Strep Sp. BYD Virus Enteritis - Clostridium Sp. Hematology Mouse Inoculation Enferotoxemi Myco - Scopulariopsis Sp. Myco - Sp. No Bacterial Growth Para - Strongyles Specimen Unsuitable Trichomonas Foetus Vibriosis		18 3 1 4 8 1 1 10 1 1 1 3 1 1 1 6 1 1 3 7 7 2
	TOTAL	83
SEROLOGY: TOTAL SPECIMENS PROCESSED		
NAME	AMOUNT	
BVD Virus IBR Virus P13 Virus Sero - Anaplasmosis Sero - Brucellosis Sero - Ictero Sero _ Leptospirosis		24 19 6 1 1 2 3
	TOTAL	56
VIROLOGY: TOTAL SPECIMENS PROCESSED		
NAME	AMOUNT	
BVD Virus IBR Virus		2
	TOTAL	3
CHEMISTRY: RESULTS		
NAME	AMOUNT	
Analysis - Calcium - Low Analysis - Calcium - Norm Analysis - Carotene - Low Analysis - Carotene - Norm Analysis - Mag Norm		4 5 1 1 4

Analysis - Phos High Analysis - Phos Low Analysis - Phos Norm Analysis - Vit A - Low Analysis - Vit A - Norm Omphalophlebitis - Unknown Tox - Arsenic Tox - Copper		4 4 1 2 2 1 2 1 6
	TOTAL	38
PATHOLOGY: RESULTS		
NAME	AMOUNT	
Acetonemia - Ketosis Autolytic Change Bacil Hemoglobinuria Blackleg Bronchitis Bronchopneumonia Cyst Degeneration Dehydration Edema Emaciation Enteritis Heart Failure Meningitis - Bacterial Myositis Nephritis Nephrosis No Visible Lesions Pneumonia - Inhalation Rumenitis Septicemia Thrombo-Embolic-Meningoenc. Tox - Lead Undetermined		1 1 1 1 1 2 1 3 1 1 1 1 2 1 1 1 2 1 1 1 1
	TOTAL	34
PARASITOLOGY: RESULTS		
NAME	AMOUNT	

TOTAL

Para - Trichostrongylus Sp.

DIAGNOSIS: LABORATORY

NAME	AMOUNT	
Encephalomyelitis - Equine Neo - Fibroma Nephrosis No Diagnosis Parasitism Sero - Brucellosis Sero - Leptospirosis Tox - Lead Undetermined		1 1 1 2 1 1 2
	TOTAL	24
BACTERIOLOGY: RESULTS		
NAME	AMOUNT	
Bact - Cory. sp. Bact - E. Coli Bact - Past - Hemolytica Bact - Proteus Sp. Bact - Staph. Aureus Bact - Strep Sp. No Bacterial Growth Para - Strongyles Parasitism		1 2 1 1 3 2 3 1
	TOTAL	15
SEROLOGY: TOTAL SPECIMENS PROCESSED		
NAME	AMOUNT	
Sero - Autumnalis Sero - Brucellosis Sero - Canicola Sero - Grippo Sero - Hardjo Sero - Ictero Sero - Pomona Undetermined		1 1 1 1 1 1 1 1 1
	TOTAL	8
CHEMISTRY: RESULTS		
NAME	AMOUNT	
Analysis - Calcium - Norm Analysis - Carotene - Low Analysis - Carotene - Norm Analysis - Mag Norm		2 1 1

Analysis - Phos High		0
Analysis - Vit A - High Analysis - Vit A - Norm Tox - Lead		2 1 1 2
	TOTAL	11
PATHOLOGY: RESULTS		
NAME	AMOUNT	
Neo - Fibroma Nephrosis Undetermined		1 1
	TOTAL	3
PORCINE 14 Specimens Submitted		
DIAGNOSIS: LABORATORY		
NAME	AMOUNT	
Atrophic Rhinitis Colitis-Ulcerative Erysipelas Mulberry Heart Disease No Visible Lesions Rabies Undetermined Virus Pig Pheumonia		5 1 2 1 1 1 3 4
	TOTAL	18
BACTERIOLOGY: RESULTS		
NAME	AMOUNT	
Bact - Erysipelothrix Insidios Bact - Strep Sp.		2 2
	TOTAL	4
SERIOLOGY: TOTAL SPECIMENS PROCESSED		
NAME	AMOUNT	
Sero - Brucellosis Sero - Ictero		1
	TOTAL	2

VIROLOGY: TOTAL SPECIMENS PROCESSED

С.

NAME	AMOUNT	
Rabies		1
	TOTAL	1
PATHOLOGY: RESULTS		
NAME	AMOUNT	
Trophic Rhinitis Colitis - Ulcerative Mulberry Heart Disease Nephrosis No Visible Lesions Undetermined Virus Pig Pheumonia		5 1 1 1 1 1 5
	TOTAL	15
OTHER: 0		
OVINE 9 Specimens Submitted		
DIAGNOSIS: LABORATORY		
NAME	AMOUNT	
Pasteurellosis Pneumonia Undetermined		1 2 6
	TOTAL	9
BACTERIOLOGY: RESULTS		
NAME	AMOUNT	
Bact - Citrobacter Group Bact - Cl-Perfringens Bact - Cl-Sp. Bact - E. Coli Bact - Past-Hemoloytica Bact - Strep Sp. Insufficient Quantity		1 1 2 3 1 3 1
PATHOLOGY: RESULTS	TOTAL	12
NAME	AMOUNT	
Pleuritis Pneumonia Indetermined		2 2 2
	TOTAL	 6

F. FELINE --- 14 Specimens Submitted

DIAGNOSIS: LABORATORY

DIAGNOSIS: LABORATORY		
NAME	AMOUNT	
Heart Failure Neo - Lymphosarcoma Nephrosis Parasitism Rabies		1 1 1
		10
BACTERIOLOGY: RESULTS	TOTAL	14
NAME	AMOUNT	
Myco - Alternaria Sp. Parasitism		1
	TOTAL	2
/IROLOGY: TOTAL SPECIMENS PROCESSED		
NAME	AMOUNT	
Rabies		10
	TOTAL	10
PATHOLOGY: RESULTS		
NAME	AMOUNT	
deart Failure Inflammation deo - Lymphosarcoma Hephrosis		1 1
	TOTAL	4

G. CANINE --- 20 Specimens Submitted

DIAGNOSIS: LABORATORY

NAME	AMOUNT
Neo - Adenoma-Perianal Gland	1
Neo - Carcinoma-Squamous	1
Neo - Melanoma Malignant	1
Neo - Mixed Mammary Tumor	1
Neo - Seminoma	2

No Diagnosis No Visible Lesions Parasitism Rabies Sero - Leptospirosis Tox - Strychnine Undetermined Uremia		1 1 7 1 2 1
	TOTAL	21
BACTERIOLOGY: RESULTS		
NAME	AMOUNT	
Parasitism		1
	TOTAL	1
SEROLOGY: TOTAL SPECIMENS PROCESSED		
NAME	AMOUNT	
Sero - Leptospirosis		1
	TOTAL	1
VIROLOGY:		
NAME	AMOUNT	
Rabies		7
	TOTAL	7
CHEMISTRY: RESULTS		
NAME	AMOUNT	
Tox - Arsenic		1
Tox - Lead Tox - Strychnine		i 2
	TOTAL	4
PATHOLOGY: RESULTS		,
NAME	AMOUNT	
Neo - Adenoma-Perianal Gland	AHOUNT	1
Neo - Carcinoma-Squamous Neo - Melanoma Malignant Neo - Mixed Mammary Tumor		1

Neo - Seminoma Nephritis No Visible Lesions		2 1 1
	TOTAL	8
AVIAN 8 Specimens Submitted		
DIAGNOSIS: LABORATORY		
NAME	AMOUNT	
Autolytic Change Def-Dis - Malnutrition Encephalitis No Diagnosis Perosis Specimen Unsuitable Undetermined		1 1 1 1 1 1 1 3
	TOTAL	9
BACTERIOLOGY: RESULTS		
NAME	AMOUNT	
Bact - Acid-Fast Organism Bact - Proteus Sp. Bact - Staph. Aureus Bact - Strep Sp. Myco - Aspergillus Sp.		1 1 1 1
	TOTAL	5
PATHOLOGY: RESULTS		
NAME	AMOUNT	
Anemia Def-Dis - Malnutrition Encephalitis Necrosis Necrosis - Myocardial Perosis Specimen Unsuitable Undetermined		1 1 1 1 1 1 1
	TOTAL	8
MILD LIFE 152 Charles Coloniated		

I. WILD LIFE --- 152 Specimens Submitted

** LABORATORY ASSIGNMENTS **

DIAGNOSIS: LABORATORY

Н.

NAME NAME	AMOUNT	
Parasitism Rabies Specimen Unsuitable Undetermined		14
	TOTAL	154
BACTERIOLOGY: RESULTS		
NAME	AMOUNT	
Parasitism		1
	TOTAL	1
VIROLOGY: TOTAL SPECIMENS PROCESSED		
NAME	AMOUNT	
Rabies Specimen Unsuitable		149
	TOTAL	152
OTHER 8 Specimens Submitted		
Total Specimens Submitted Total Diagnosis Total Not Diagnosed Total Incomplete Total Specimens Unsuitable Total Undetermined Total Services Not Offered	8 8 0 0 0 0	
** LABORATORY ASSIGNMENTS **		
DIAGNOSIS: CLINICAL CONDITION SUSPECTED		
NAME	AMOUNT	
Parasitism Tox - Arsenic Tox - Strychnine Water, Good Water, Poor Water, Unuseable		1 1 1 3 2
	TOTAL	 9
CHEMISTRY: RESULTS	TOTAL	9
NAME	AMOUNT	

DIAGNOSTIC LABORATORY REPORT

Tune 1974

SEROLOGY REPORT

EST			SPECIES	POSITIVE	NEGATIVE	SUSPICIOUS	TOTA
naplasma CF			Cattle	5	873	12	890
Luetongue			Cattle	1	787	61	849
luetongue			Ovine		240	7	247
luetongue			Swine		1	5	6
rucella abortus a	gglutinat	ion	Cattle		8,877	41	8,918
" "	**	(plate - field & market)	Cattle	235	28,201		28,436
11	"	(seminal plasma)	Cattle		3		3
" "	11	(card - field & market).	Goat		12		12
11 11	11	***************************************	Horse		2		2
11 11	11	(card)	Swine		49	1	49
quine Infectious .	Anemia (C	oggins Test)	Horse		356		356
eptospira canicol	a aggluti	nation	Catrle		5		5
eptospira grippo-	typhosa a	gglutination	Catrle		5	1	5
" hard jo	agglutina	tion	Cattle		15		15
11 11	11	***************************************			1	-	1
" icteroh	emorrhagi	a agglutination		1	12	2	15
" tules a	gglutinat	ion	"		5	-	- 13
" borinca	na agg		"		5		5
" hebdoma	dis agglu	tination	"		5	-	5
" pomona	agglutina	tion	"		26	3	29
11	- 11				1	1	1
							_



MONTANA VETERINARIANS' ANIMAL DISEASE REPORT

JUNE, 1974

56 Veterinarians Reporting..... 31 Counties Reporting..... 31 Diseases Reported

	INDEX OF COUNTIES													
ATTLE:	1	3	4	7	8	10	11	14	15	16	18	21	22	
Abortion	1													
Actinobacillosis				1			2_	1					_	
Anaplasmosis		1			1	1		1					_	
Arthritis														
Blackleg	2													
Cancer eye	14			1			5	6				.3		
Coccidiosis	2									1		23		
Diptheria	4		-					2						
Foot-rot								4						
Grass tetany	2.5													
Infectious keratitis								2						
Leptospirosis						1						-		
Malignant edema						-						1		
Mastitis	-	-						1						
Metritis		1						1						
Pulmonary emphysema	-	1		-		-		1	1					
Rhinotracheitis	2	-				-	1			1			1	
Shipping fever	3	-				-	1	110	5		-			
Tetanus	-	-			1		1	1	-	-		1		
Urolithiasis	5	4			-							1	1	
	-	1				-	1	1				-	1	
Vibriosis		1				-	-	-	1	1	_	1	1	
Virus diarrhea	-	1		-			-	-	1	-		1	1	
Virus warts	-	+		-		-	-	+	-	-	-	1	1-	
HEEP:								1	1			1		
Contagious ecthyma	-	+				-	-	-	-	1-	1	12	1	
Enterotoxemia	-	-				-	+	-	-	+	-	1	1	
VINE:		1					1			1		1	1	
Atrophic rhinitis		13	6	-		-	+		8	-	-	+	+-	
Erysipelas	-	13	0	-	-	-	1-	-	10	-	1-	1-	+	
RSES:	10	10		6		1		2	5		2		1	
Distemper	12	10	-	0	-	-	-	1-	1-	1-	1-	-	+	
Infectious Anemia	-	-	-	18	-	-	-	-	13	10	10	1-	1-	
Influenza	-	114	-	118	-	-	1-	-	11.5	110	1-10	-	-	
ngs:		1		1 7.5	1		1		2		1 1	-	1	
Distemper	6	5	-	15	-	-	-	-	1	-	1-	1-	+	
Infectious hepatitis		2	-	-	-	-	-	-	1	-	-	-	+	

56 Veterinarians Reporting..... 31 Counties Reporting 31 Di

31 Diseases Reported

DISEASES AND SPECIES:

					TNDF	X OF	COL	NTIE	C				-
CATTLE:	23	24	25	28	30	32		36	39	41	1/2	44	146
Abortion	-		-		-		- 33	150	33	+ T	42	44	140
Actinobacillosis						_		-	-	-	-	-	-
Anaplasmosis			1				-	3	-	-	-	17	+-
Arthritis							_	1	-	-	-	11/	-
Blackleg		2				-		-	-	-	-	-	-
Cancer eye		-	-	-	_		1	-	-	-	4	-	-
Coccidiosis			-	_			-	8	-	-	1 4	-	-
Diptheria			-	_	-			-	-	-	-		-
Foot-rot		_	4	-			-	-		-	-	-	-
Grass tetany	_			-				-	-	-	-	8	-
Infectious keratitis	_		-					30		_	-	12	-
Leptospirosis			-	-				30		-	-	25	-
Malignant edema									-	-			-
Mastitis	-	72						-	-		-		-
Metritis	-	14	-		_			-	-				_
Pulmonary emphysema	-		2	1		-		-				<u></u>	
Rhinotracheitis	-		-4	т_		2					_	16	
Shipping fever	-	2								5			
Tetanus	-		-								1		
Urolithiasis	-												1
Wib-ii	-		_									- 1	
Vibriosis	-												60
Virus diarrhea	-												
Virus warts	-												
SHEEP:				- 1	- 1								
Contagious ecthyma											1		
Enterotoxemia											2		_
SWINE:	1 1												
Atrophic rhinitis						1		1					
Erysipelas		1	2								2		
HORSES:	1 1	- 1											
Distemper								5					
Infectious Anemia				1				-		_			
Influenza	100	5	3	16		6					4		
00GS:											-7	-	
Distemper		6	32		4	4			6		12		
Infectious hepatitis										-	1		
Leptospirosis		-	2				-	-	-	-	3	-	

1. 11 " "

DISEASES AND SPECIES:

	IND	X O	F CO	UNTI	ES		TOTAL	TOTAL
ATTLE:	47	50	51	53	56		CASES	HERDS
Abortion,		-					1	1
Actinobacillosis	3	1	1		33		42	29
Anaplasmosis				18			42	1.5
Arthritis		1			16		16	10
Blackleg		1					4	3
Cancer eye	2	-	-	6	27		69	41
Coccidiosis	-	1		1			36	8
Diptheria	1	-		-			6	3
Foot-rot		4	-		1		21	15
Grass tetany		1-		-	-		37	10
Infectious keratitis	-	-	-				57	18
Leptospirosis	-	-	-				1	1
Malignant edema	1	+-	-	-	-		1	î
Mastitis	1	-	-	_	8		80	4.8
Metritis	1	-	-	-	2		2	1
Pulmonary emphysema	-	1	-		-		22	10
Rhinotracheitis	-	+-	-		-		7	3
		-	-	-	-		21	7
Shipping fever	-	-			-		1	1
Tetanus	-	-	-	1	1		13	13
Urolithiasis	-	-	-	-	1		61	2
Vibriosis	-	1		3	-		5	4
Virus diarrhea		1	-	-	16		16	10
Virus warts	-	+	-	-	10		10	
EEP:	1		1				1	1
Contagious ecthyma	}	+-	-	2	-		6	3
Enterotoxemia	-	-	_		-		-	
VINE:	1		1		3		3	2
Atrophic rhinitis			-	-	22		44	6
Erysipelas	-	-	-		122		44	- ·
DRSES:	1	-		2	1		57	29
Distemper	-	13	-		-		1	1
Infectious Anemia	-	-	-	0.7	-		226	163
Influenza	-	+-	-	27	-		220	103
OGS:	-				1 2		101	98
Distemper	5	_	-	1	2		5	5
Infectious hepatitis	1		-		-		6	6
Leptospirosis	1 1				1	1	0	
							1011	568
OTAL CASES AND HERDS							TOIL	300

INDEX OF COUNTIES

FOR DOCUMENT OF THE PARTY OF TH					
NO.	COUNTY	NO.	COUNTY	NO.	CGUNTY
1	Beaverhead	20		39	Powell
2	Big Horn	21	Hill .	40	Prairie
3	Blaine	22	Jefferson	41	Ravalli
4	Broadwater	23	Judith Basin	42	Richland
5	Carbon	24	Lake	43	Roosevelt
6	Carter	25	Lewis & Clark	44	Rosebud
7	Cascade	26	Liberty	45	Sanders
8	Choteau	27	Lincoln	46	Sheridan
9	Custer	28	Madison	47	Silver Bow
10	Daniels	29	McCone	48	Stillwater
11	Dawson	30	Meagher	49	Sweet Grass
12	Deer Lodge	31	Mineral	50	Teton
13	Fallon	32	Missoula	51	Toole
14	Fergus	33	Musselshell	52	Treasure
15	Flathead	34	Park	53	Valley
16	Gallatin	35	Petroleum	54	Wheatland
17	Garfield	36	Phillips	55	Wibaux
18	Glacier	37	Pondera	56	Yellowstone
19	Golden Valley	38	Powder River		

MONTANA DEPUTY STATE VETERINARIANS Address and Telephone Numbers August 8, 1974

E S ABY, D.V.M. BOX 397 GLENDIVE MONT 59330 365-3475

ORLEY ARTHUR. D.V.M. BOX 67 ROUNOUP MONT 59072 323-2287

ROBERT R BELL, O.V.M. 20X 190 CULBERTSON MONT 59218 787-6682

F J ALDERINK, O.V.M.

HOT SPRINGS MONT 59845 741-2576

JOE K BABER, O.V.M. CUSTER VET CLINIC BOX 121 MILES CITY MONT 59301 232-4674

DAVID N BISBEE, O.V.M. SIMMS MT 59477

965-3232

JOHN R. ALEXANDER, O.V.M. BOX 426, MCLEOD ROUTE BIG TIMBER, MT. 59011 932-3345

C. BEN BAKER, O.V.M. BOX 24 SHEPHERO, MT. 59079 259-6529

PAUL H BISSONETTE, D.V.M. BOX 287 DEER LODGE MONT 59722 846-1925

C K ANDERSON, D.V.M. VET RESEARCH LAB MSU BOZEMAN MONT 59715 994-4705

STAR RT. GALLATIN GATEWAY, MT. 59730 LEWISTOWN, MT. 59457 388-4272

ARLA N. BARKEMEYER, O.V.M. GARY L. BLAKEMORE, O.V.M. P U BOX 827 538-5660

JUDITH M. ANDERSON, O.V.M. 1355 BITTERROOT ROAD HELENA, MT. 59601 442-6450

BASE VETERINARIAN MALMSTROM A.F.B. GREAT FALLS, MT. 59402 731-3065

VLADIMAR BLAWATSKY, D.V.M. 625 9TH AVE HAVRE MONT 59501 265-7736

MELVYN ANZICK, O.V.M. 1104 E PARK LIVIN,STON MONT 59047 222-3011

ROGER BAXTER, D.V.M. ROX 712 CHINOOK MONT 59523 357-2544

E WAYNE BOLAND, D.V.M. 50 MOORE LANE BILLINGS MONT 59102 252-4159

DAVID F BRISTOL, D.Y.M.
GLACIER VETERINARY CLINIC
COLUMBIA FALLS, MT. 59912
892-4319

ROBERT C. BURGMAIER, D.V.M. BOX 57 BRADY, MT. 59416 753-2544 JAMES C. CLEMENT, D.V.M. STAR RT. VAUGHN, MT. 59487 965-3232

J N BROSSER, D.V.M. 920 S W HIGGINS MISSOULA MONT 59801 543-7723

G. WARD BURLEIGH, D.V.M.
HEATH ROUTE
LEWISTOWN, MT. 59457
538-9712

E R CLINE, D.V.M. BOX 821 LEWISTOWN MONT 59457 538-3663

R J BROPHY, D.V.M. RT 2 BOX 2073 HAMILTON MONT 59840 363-1123

K R BURRITT, D.V.M. 3240 HARRISON AVE BUTTL MONT 59701 494-3630

D G COLMEY, D.V.M. BOX 521 LIVINGSTON MONT 59047 222-1700

H. A. BROSZ, D.V.M. RT I BOX 288-15 MILES CITY MT 59301 232-0569 M R CAMPBELL, D.V.M. 839 POLY DR BILLINGS MONT 59102 252-3006 E F COLTON, D.V.M. BOX 206 KALISPELL MONT 59901 756-6695 .

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GLASGOW VET CLINIC
GLASGOW MONT 59230
228-9313

DONALD L BUELKE, D.V.M. VICTOR VET CLINIC VICTOR MT 59875 642-3471

J E CATLIN, D.V.M. M S U BOZEMAN MONT 59715 994-4705 GARY L. COOK, D.V.M. BOX 1111 BOZEMAN, MT. 59715 587-4275 EARL COOPER, D.V.M. 1509 RIVER RD MISSOULA MT 59801 549-4009 HARRY DISNEY, D.V.M. RT. 1, BOX 1351 LIBBY, MT. 59923 293-7410 H. H. FANELLI, D.V.M. 414 W MONTANA LEWISTOWN, MT. 59457 538-3258

DR. R.L. CORNELIUS, D.V.M. BOX 494 BAKER, MT. 59313 778-2325 M P DORAN, D.V.M. BOX 1665 GREAT FALLS MONT 59401 453-1629

D. P., FERLICKA, D.V.M.
DEPARTMENT OF LIVESTOCK
HELENA, MT. 59601
449-3074

R. L. COWEN, D.V.M. 112 SOUTH 18TH ST BILLINGS, MT. 59101 245-6447 DUANE M DOUGLAS, D.V.M. BOX 703 SIDNEY MONT 59270 482-1413 J. M. FERRELL, D.V.M. ROUTE 3
BILLINGS, MT. 59101
373-5965

R J CROSSLEY, D.V.M. 1605 STEPHENS MISSOULA MONT 59801 543-4641

I J DYEKMAN, D.V.M. BOX 397 GLENDIVE MONT 59330 365-3475 JOHN W FORSBERG, D.V.M. BOX 967 FORSYTH MONT 59327 356-7564

JOHN J CURTIS, D.V.M. DRAWER O MALTA MONT 59538 654-1794 ROGER D ERFLE, D.V.M. 90X 1703 BILLINGS MT 59102 245-4847 J W FRAZER, D.V.M. BOX 771 POLSON MONT 59860 883-5623

E G DAVIS, D.V.M. 316 CENTRAL AVE W GREAT FALLS MONT 59401 761-7055 L A ERICKSON, D.V.M. 2500 HARRISON AVE BUTTE MONT 59701 792-0550 H E FURGESON, D.V.M. BOX 141 ANACONDA MONT 59711 797-3707 S D GATES, D.V.M. BOX 821 LEWISTOWN MONT 59457 538-3663 H C GDODELL, D.V.M. 8D3 3RD ST N W GREAT FALLS MONT 59401 452-8402

GARY D HAMMILL, D.V.M. RT 2 KALISPELL MT 59901 752-3530

J W GEE, D.V.M.
JUDITH BASIN VET SERVICE
STANFORD MONT 59479
566-2687

ERNEST E GOULD, D.V.M. BOX 146 ABSARDKEE MONT 59001 328-3041 GLENN C. HALVER, D.V.M. DEPARTMENT OF LIVESTOCK HELENA, MT. 59601 449-3074

A L H GEFFERT, D.V.M. BOX 344 GLENDIVE, MT. 59330 365-5552 T E GRIFFITHS, D.V.M. 1212 12TH ST W BILLINGS MONT 59101 ALLEN L HAN, D.V.M. BDX 62 CHESTER MT 59522 334-7878

CHARLES GERNER, D.V.M. BOX 109 SWEETGRASS, MT. 59484 335-2142 R W GUSTAFSON, D.V.M. BDX ID87 CONRAD MONT 59425 278-3236 H B HANICH, D.V.M.
92D S W HIGGINS
MISSDULA MONT 598D1
543-7723

K A GERNER, D.V.M. BOX 387 STEVENSVILLE MONT 59870 642-3257 W J HADLOW, D.V.M. 9D8 S 3RD HAMILTON MONT 59840 363-2805 PATRICK D HATFIELD, D.V.M.
VICTOR VET CLINIC
VICTOR MONT 59875
642-3471

JAMES W. GLOSSER, D.V.M. DEPARTMENT DE LIVESTOCK HELENA, MT. 59601 449-3074 HENRY C. HAIRSTON, D.V.M. 1 EAST BRDADWAY BUTTE, MT. 597D1 723-3331 W. W. HANKINS, JR., D.V.M. BOX 1253 DILLON, MT. 59725 683-2385 ARTHUR F. HAYES, O.V.M. BOX 152 BIRNEY, MT. 59012 984-2576 J M HITCH, D.V.M. BOX MM MALTA MONT 59538 654-2710 W HRYCKIW, O.V.M. BOX 104 HAVRE MONT 59501 265-2122

A G HEATON, O.V.M. BOX 287 DEER LOOGE MONT 59722 846-1925 PAUL N. HOLCOMB, O.V.M. ROUTE 1 BOZEMAN, MT. 59715 388-6320 BECKHITH HUBBELL JR, 0.V.H.
CHIEF
DIASTROSTIC LABORATORY BUREAU
OEPT OF LIVESTOCK
P O BOX 997
BOZEMAN MT 59715
586-5952

JAY D. HEDRICK, O.V.M. GLASGOW VETERINARY CLINIC GLASGOW, MT. 59230 228-9313 H K HOLLOWAY, O.V.M.
HARLOWTON MONT 59036

632-4371

632-5548

J J HURRY, D.V.M. 1144 LAKE ELMO OR BILLINGS MONT 59101 252-3793

DONALO N. HENKE, O.V.M. BOX 1179 ANACONDA, MT. 59711 563-2440 W O HOLMES, O.V.M.
HARLOWTON MONT 59036

OR. MORTON O. HUTCHINSON, OVM 1509 JANIE ST BILLINGS, MT 59101 248-7411

RAWLIN R. HERIGSTAO, O.V.M. RR 2 80% 74 SAVAGE, MT. 59262 766-2281

H A HOPSON, O.V.M. BOX 302 WOLF POINT MONT 59201 653-1821 0 0 JAMES, 0.V.M. BOX 396 CIRCLE MONT 59215 485-2610

R F HERREN, O.V.M. 441 SHILOS ROAD BILLINGS MT 59102 656-1910

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DEPARTMENT OF LIVESTOCK
HELENA, MT. 59601
449-3074

G A JELLUM, D.V.M. BOX 926 CHINOOK MONT 59523 357-2850 LEONARO J. JENSEN, O.V.M. BOX 606 RONAN, MT. 59864 676-4251

R G KAUK , 0.V.M. BOX 57 BRADY MONT 59416 753-2240

J. A. LAMBERT, O.V.M. BOX 579 WOLF POINT, MT. 59201 653-2829

C L JOHNSON, O.V.M. BOX 216 CUT BANK MONT 59427 938-4082

LORAN W KELLER, 0.V.M. BOX 1087 CCNRAD MT 59425 278-3236 ALFONS LAZAREWICZ, O.V.M.

SEELEY LAKE, MT. 59868 None

R D JOHNSON, O.V.M. 50 MOORE LANE BILLINGS MONT 59102 151-4252 R C KEYSER, O.V.M. BOX 546 RONAN MONT 59864 676-4251 C R LEACH, D.V.M. BOX 189 MILES CITY MONT 59301 232-2559

BRIAN LOUIS JONES, D.V.M. RT I - BOX 280 ANACONDA, MT. 59711 563-8233

WILLIAM A KIMBALL, D.V.M. P O BOX 455 BIG FORK MONT 59911 837-6665 KENNETH C LEE, O.V.M. OANIELS VET. CLINIC SCOBEY, MT. 59263 487-2862

R JOURDAN, D.V.M. 1321 AIRPORT ROAD BILLINGS MONT 59101 245-4772

G E KNORR, D.V.M. BOX 1253 DILLON MONT 59725 683-2385 ROBERT P LEE, D.V.M.
DOUBLE ARROW VET CLINIC
CHOTEAU MONT 59422
466-2110

R E KANE, D.V.M.
630 SUNNYSIDE AVE
PLENTYWOOD MONT 59254
765-1760

R F LAFRANCE, O.V.M. BOX 457 BRIDGER MONT 59014 662-3330 JOHN H. LEEDS, D.V.H. BOX 282 BELT, MT. 59412 277-3825 HUGH A LESLIE. D.V.M.

ENNIS MONT 59729 682-4283 RODNEY M MADSEN, D.V.M. 409 SECURITIES BLDG BILLINGS MT 59101 252-6608 DOUGLAS MCGREGOR, D.V.M. 44) SHILOH ROAD BILLINGS MONT 59102 656-1910

ALAN L. LEWIS, D.V.M. GLASSOW VETERINARY CLINIC GLASGOW, MT. 59230 228-9313

REED MARBUT, D.V.M. GRANT CREEK ROAD MISSOULA, MT. 59801 728-2122 JOHN A. MCILHATTAN, D.V.H.
BRIDGER VIEW TRAILER PARK
NO. 35
BRIDGER DRIVE
BOZEMAN, HT. 59715
587-2476

RAYMOND G. LIEN, D.V.M. P. O. BOX 83 THREE FORKS, MT. 59752 285-3127 DR. E. L. MARSHALL, D.V.M.
ROUTE 1
HELENA FLATS ROAD
KALISPELL, MT 59901
756-2500

H K MCNEW, D.V.M. BOX 887 SIDNEY MONT 59270 482-3803

JAMES L LOESCHER, D.V.M. 1301 CEDAR HELENA MONT 59601 442-3160 WAYNE H MARTIN, D.V.M. 316 CENTRAL AVE W GREAT FALLS MONT 59401 761-7055 FRANK W MEIWALD, D.V.M. 1016 17TH ST HAVRE MONT 59501 265-4514

ROBERT C LOTT, D.V.M. BOX 98 TWIN BRIDGES MONT 59754 684-5513 J D MC CLEARY , D.V.M. BOX 506 HARDIN MONT 59034 665-2405 FRED L METCALF, D.V.M. BOX 449 DRUMMOND MONT 59832 288-3671

ROGER D. LUEHRS, D.V.M. 2605 W. MAIN BOZEMAN, MT. 59715 587-0474 W D MC FARLAND JR., D.V.M. BOX 82 FORT BENTON MONT 59442 622-3732 HARRY A MICHAEL, D.V.M. BOX 126 WORDEN MONT 59088 967-3600 ROBERT J MISER, D.V.M. 115 W GRANT BOZENAN MT 59715 587-8746 N W NELSON, D.V.M. 80x 1253 DILLON MONT 59725 683-2385

CONRAD O ORR, D.V.M. 3701 HIWAY 93 MISSOULA MONT 59801 728-1110

GERALD D MITCHUM, D.V.M. 2605 W MAIN ST BOZEMAN MONT 59715 587-0474 H W C NEWBERRY, D.V.M. 151 HIGHWAY 2E KALISPELL MONT 59901 756-6766 R D PAINTER, D.V.M. 2930 N MONTANA AVE HELENA MONT 59601 442-6450

D W MOORE, D.V.M. RT 2 BOX 2073 HAMILTON MT 59840 363-1123 8 F NEWCOMB, D.V.M. 4217 2ND AVE N GREAT FALLS MONT 59401 453-2264 N. D. PATTERSON, D.V.M. BOX 159 LEWISTOWN, MT. 59457 538-5380

JAMES O MURRAY, D.V.M. SHIELDS RT LIVINGSTON MONT 59047 222-3700

J H NEWHALL, D.V.M. RT 2 BOX 200 BOZEMAN MONT 59715 587-0218 B P PATTON, D.V.M.
DOUBLE ARROW VET CLINIC
CHOTEAU MONT 59422
466-2152

R P MYERS, D.V.M. RT 1 80X 433 SELGRADE MONT 59714 388-4272

H L NORDELL, D.V.M.

GEYSER MONT 59447
735-2584

K C PEARSON, D.V.M. 344 IST AVE W KALISPELL MT 59901 752-1933

OR. CARL F. NASH, D.V.M. 729 AVE. B BILLINGS, MT. 59102 248-7411

JOHN D OPALKA, D.V.M. DRAWER H MISSOULA MONT 59801 728-1971 THOMAS W. PEARSON, D.V.M. BOX 2905 GREAT FALLS, MT. 59401 761-8282 JOHN D. PEEBLES, D.V.M. P O BDX 627 CHDTEAU, MT. 59422 727-6139

JACK REA, D.V.M. BDX 527 THREE FORKS MONT 59752 285-3225

WILLIAM A ROGERS, D.V.M. 5100 9TH AVE S GREAT FALLS MT 59401 - 761-8183

JOHN F PETERSEN, D.V.M. BDX 29D5 GREAT FALLS MT 59401 761-8282 R D READ, D.V.M. BOX 158 RDNAN MONT 59864 676-4251

DENNIS D. ROSS, D.V.M. P.D. BDX 703 SIDNEY, MT 59270 482-1413

WALTER PRENDERGAST, D.V.M. 344D 4TH AVE S GREAT FALLS MT 59401 453-0189 DONALD W. REINART, D.V.M. BOX 926 CHINOOK, MI. 59523 357-2850 HERMAN ROSS, D.V.M. BDX 765 KALISPELL MDNT 59901 756-6020

WILLIAM J QUINN, D.V.M.
DIA:ho.TIC LABORATORY BUREAU
DEPT OF LIVESTOCK
P O 8DX 997
BDZEMAN MT 59715
586-5952

W. H. RIDGE, D.V.M. 190D - BTH AVENUE SOUTH GREAT FALLS, MT. 59401 453-6675

DR. & MRS. J. W. SAFFORD WINDWARD COVE DAYTON, MI. 59914 849-5447

DICK RAGLAND, D.V.M. RT 1 BDX 194 HARDIN MDNT 59034 665-1899

H SILBERT RIEK, D.V.M. BOX 948 SIDNEY MONT 5927D 482-3107 ROBERT SAGER, D.V.M. 3701 HIGHWAY 93 SD. MISSOULA, MT. 59801 728-1110

RAY W. RANDALL, D.V.H. BOX 540 BRIDGER, MT. 59DI4 662-3330 G D ROBERTSON, D.V.H.
BDX 1111
BDZEMAN MONT 59715
587-4275

GUS W SALBADDR, D.V.M. 533 24TH ST. SW BILLINGS MONT 59102 656-6320 MARDELL SCHARA, D.V.M. 52 COLOMBIA GARDENS BUTTE MONT 59701 792-6464 KIRK A. SEEKINS, D.V.M. 2930 NO. MONTANA AVE. HELENA, MT. 59601 442-6450

PAUL SMILEY, D.V.M. RT. 1A, BOX 26 COLUMBIA FALLS, MT. 59912 892-5385

WILLIAM N. SCHENDEL, D.Y.M. P.O. BOX 476 WHITE SULPHUR SPRINGS, MT 59645 547-3857 DON K SHAFFNER, D.V.M. BOX 1253 DILLON MONT 59725

683-2385

DONALD E. SMITH, D.V.M. BOX 113 JORDAN, MT. 59337 435-6220

FRED R SCHMIDT, D.V.M. P 0 BOX 494 BILLINGS MONT 59101 245-4847 NORMAN L. SHATTO, D.V.M. 3701 HIGHWAY 93 SOUTH MISSOULA, MT. 59801 728-1110 E K SMITH, D.V.M. RT 1 3745 HARRISON BUTTE MONT 59701 494-3656

JOHN B SCHMITT, D.V.M. RT 4 BOX 33 BOZEMAN MT 59715 587-3446 G H SHEETS JR., D.V.M. BOX 189 MILES CITY MONT 59301 232-2559

RICHARD L. SMITH, JR. D.V.M. P.O. BOX 1265 MILES CHTY, MONTANA 59301 232-2559

DALE J SCHOTT, D.V.M.

BELT MONT 59412 277-3542 DR. VALDIS SKROMS, D.V.M. 2129 LYMAN AVE. BILLINGS, MT. 59102 248-7411

SHERMAN J SMITH, D.V.M. BOX 11111 BOZEMAN MONT 59715 587-4275

SEORGE SEAMON, D.V.M. RT 1 SILESIA MONT 59080 962-337 G SLOBOJAN, D.V.M. BOX 206 KALISPELL MONT 59901 756-6695

VERNON D SPEAR, D.V.M. 705 POLARIS WAY MISSOULA MT 59801 728-2181 E W STAHL, O.V.M. RT 2 MULLAN RD W MISSOULA MT 59801 453-5354

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ARTHUR E STAUDT, D.V.M. STAR RT COLUMBUS MONT 59019 322-5924

H G STOENNER, D.V.M. 1102 S 2ND ST HAMILTON MONT 59840 363-1864

DONALO R. THURSTON, D.V.M.
TRI-STATE VET CLINIC
BOX 399
BELLE FOURCHE, S. DAK. 57717
892-2844

EARL H STEVENS, O.V.M. 2201 ARGYLE BUTTE MT 59701 683-5542 H A STOKKE, O.V.M. BOX 967 FORSYTH MONT 59327 356-7564 DONALD G TOLMAN, O.V.M. STAR ROUTE BELFRY MONT 59008 645-2616

MICHAEL KENT STEVENS, O.V.M.
1812 MILES AVE.
BILLINGS, MT. 59102
656-1910

ROSE STONEBERG, D.V.M. LIMESTONE ROUTE NYE, MT. 59061 328-3041 JAMES GREGORY TOOKE, D.V.M. BOX 703 SIDNEY, MT. 59270 482-1413

C E STINEBURG, O.V.M. BOX 11 CHINOOK MONT 59523 357-4132 STANLEY SWARTZ, 0.7.M.
3701 HIWAY 93 SOUTH
MISSOULA MONT 59801
728-1110

R L TURCOTTE, 0.V.M. RT 1 BOX 238 LAUREL MONT 59044 698-6722

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TWIN BRIOGES MONT 59754 684-5514 D D VAN DER HAGEN, D.V.M. 80X 659 BIG TIMBER MONT 59011 932-2116

THOMAS M. WILLIAMS, D.V.M. P. O. BOX 1253 DILLON, MT. 59725 683-2385

BLAIR WOODGER, D.V.M. P.O. BOX 166 CHENEY, WASH. 99004

JOSEPH E VESCOVI, D.V.M. 80X 333 ROUNDUP MT 59072 323-2184

OR. F. SMITH WILLIS, D.V.M. FOWLER A YOUNG, D.V.M. P. O. 80X 205 EVERGREEN SUBURB KALISPELL, MT. 59102 756-3382

BI, SKY VET CLINIC WHITEFISH MONT 59937 862-2525

ROBERT O. WALTON, D.V.M. BOX 471 WILLISTON, NO. DAK. 58801 572-9271

JOHN A. WILSON, JR., D.V.M. P. O. BOX 967 SHERIDAN, WYO. 82801 674-4262

A T ZANCANELLA, D.V.M. BOX 1703 BILLINGS MONT 59103 245-4847

JACK K WARD, D.V.M. RT 2 BOX 2073 HAMILTON MONT 59840 363-1123

D. E. WOERNER, D.V.M. RT 1 BOX 202A LAUREL, MT. 59044 698-8977

OR. DEAN W. WERRING, O.V.M. GRANDVIEW TRAILER COURT AVENUE C LOT 50 GREAT FALLS, MT. 59405 761-8120

W A WOHLIN. O.V.M. 3113 BEECH AVE BILLINGS MONT 59102 656-3680

OONALD O WHEELER. D.V.M. 2500 HARRISON AVE BUTTE MONT 59701 792-0550

LYNN F. WOODARD, O.V.M. BRUADUS STAGE MILES CITY, MT. 59301 232-5994

STATE LIVESTO	CK HEALTH OFFICIALS	1974
STATE		TELEPHONE NUMBER
P.	r. J. G. Milligan, State Veterinarian	.205-269-6135 or 205-269-6136
Ρ.	r. Fred S. Housinger, State Veterinarian . O. Box 490 uneau, Alaska 99801	.907-586-6352
Re	r. L. N. Butler, State Veterinarian oom 419, 1688 West Adams Street hoenix, Arizona 85007	.602-271-4293
A: 2:	r. Richard M. Thomas, Director rkansas Livestock and Poultry Commission 915 South Pine Street	.501-371-1311
	ittle Rock, Arkansas 72204	
	r. L. E. Bartelt, AssistantDirector andtate Veterinarian	.916-445-6506
D	ivision of Animal Industry, California Department f Food and Agriculture, Room A-114	
1:	220 N Street	
	acramento, California 95814	
	r. Wm. C. Tobin, State Veterinarian	.303-892-2828
	525 Sherman Street enver, Colorado 80203	
	,	202-566-4616
2	r. Robert J. Stadler, State Veterinarian	.203-300-4010
DELAWARED	r. H. Wesley Towers, Jr., State Veterinarian	.302-678-4821 or
	elaware Department of Agriculture	302-678-4823
	lover, Delaware 19901	
D	or. C. L. Campbell, State Veterinarian, Director division of Animal Industry, Florida Department of Agriculture and Consumer Services	.904-488-7747
3	28 Mayo Building	
	Callahassee, Florida 32304	101 (5) 2667
G	or. J. F. Andrews, State Veterinarian Georgia Department of Agriculture	404-050-3007
	9 Hunter Street, S. W. Atlanta, Georgia 30334	
HAWALI I	Or. Eruest H. Willers, State Veterinarian	808-941-3071
I	P. O. Box 5425 Honolulu, Hawaii 96814	
1	HOHOLUTA, IMPALL YOUR	



State Fairgrounds,

TELEPHONE NUMBER

Springfield, Illinois 62706

INDIANA... Lowell W. Hichman, State Veterinarian.......317-633-4147
801 State Office Building
Indianapolis, Indiana 46204

KANSAS.... Dr. Gerald D. Gurss, Livestock Commissioner..........913-296-2326
Kansas Animal Health Department
Fourth Floor, Mills Building
109 West Ninth Street,
Topeka. Kansas 66612

LOUISIANA.. Dr. Forest E. Henderson, State Veterinarian.........504-389-5688 P. O. Box 44003, Capitol Station Baton Rouge, Louisiana 70804



STATE	TELEPHONE NUMBE
	Dr. J. G. Flint, Secretary and Executive Officer612-296-5000 Livestock Santrary Board 555 Wabasha Street St. Paul, Minnesota 55112
	Dr. Harvey F. McCrory, State Veterinarian and601-354-6089 Birector of Diagnostic Laboratory P.O. %ox 4356 Jackson, Mississippi 39216
MISSOURI	Dr. Taylor N. Woods, Director of Animal Health314-751-3377 State Department of Agriculture P. O. Box 630 Jefferson City, Missouri 65101
MONTANA	Dr. Glenn C. Halver
NEBRASKA	Dr. N. W. Kruse, State Veterinarian
NEVADA	Dr. John L. O'Harra, Administrator
NEW HAMPSHIR	E Dr. C. B. Dearborn, State Veterinarian
NEW JERSEY.	Dr. C. Kenneth Uewell, Director, Division of609-292-3965 Animal Health, State Department of Agriculture P. O. Box 1888 Treuton, Jew Jersey 08625
W PEXTCO.	Or. Robert L. Pyles, State Veterinarian
	Dr. Harold E. Nadler, Director
MERSURIA	N Pr. T. F. Zweigart, State Veterinarian919-829-7601 P. O. Box 26026 Raleigh, North Carolina 27611



BINE BIVESTOCK REALTH OFFICIALS (Continued)	
STATE	TELEPHONE NUMBER
NORTH DAKOTA Dr. Dean E. Flagg, Executive Officer and State Veterinarian Livestock Sanitary Board, State Capitol Building Bismarck, North Dakota 58501	701-224-2655
OHIO Dr. Harry E. Goldstein, Chief	614-866-6362
OKLAHOMA Dr. John W. Holcombe, Director	405-521-3891
OREGON Dr. Glenn B. Rea, State Veterinarian Oregon Department of Agriculture Salem, Oregon 97310	503-378-4710
PENNSYLVANIA Dr. E. E. Denlinger, Director Bureau of Animal Industry State Department of Agriculture 2301 North Cameron Street Harrisburg, Pennsylvania 17120	717-787-5002
RHODE ISLAND Dr. T. J. Grennan, Jr., Chief	401-277-3047
SOUTH CARCLINA Dr. Carl E. Boyd, Director Livestock-Poultry Health Department Box 1771 Columbia, South Carolina 29202	803-788-2260
SOUTH DAKOTA Dr. M.D. Mitchell Executive Secretary and State Veterinarian Livestock Sanitary Board State Office Bu'llding #1, Room 103 Pierre, South Dakota 57501	605-224-3321
TENNESSEE. Dr. John R. Ragan, State Veterinarian P. O. Box 40627, Melrose Station Nashville, Tennessee 37204	615-741-1441
TEXAS Dr. H. Q. Sibley, Executive Director Texas Animal Health Commission 1020 Sam Houston State Office Building Austin, Texas 78701	512-475-4111
UTAH Dr. F. James Schoenfeld, State Veterinarian 412 State Capitol Building Salt Lake City, Utah 84114	801-328-5421



STATE TELEPHONE NUMBER Livestock Division 116 State Street Montpelier, Vermont 05602 VIRGINIA... Dr. W. L. Bendix, State Veterinarian and Director....804-770-2485 Division of Animal Health and Dairies 1444 East Main Street Richmond, Virginia 23219 WASHINGTON, Dr. O. L. Montgomery, State Veterinarian..............206-753-5040 Division of Animal Industry, Department of Agriculture 406 General Administration Building Olympia, Washington 98504 Animal Health Division, Department of Agriculture Capitol Building, Room E-102 Charleston, West Virginia 25305608-266-3481 WISCONSIN., Dr. A. A. Erdmann..... Chief State-Federal Veterinarian Animal Health Division Wisconsin Department of Agriculture 801 West Badger Road Madison, Wisconsin 53713 WYOMING.... Dr. N. R. Swanson, State Veterinarian and...........307-777-7515

Executive Officer, Livestock Board

State Office Building Cheyenne, Wyoming 82001



SEP 1 3 1974



STATE OF MONTANA

DEPARTMENT OF LIVESTOCK

Animal Health Division

Helena, Montana 59601

73-645-

SEPTEMBER

MONTHLY LETTER

1974

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MONTHLY LETTER - AUGUST, 1974

REGIONAL SYLVATIC RABIES CONFERENCE

The program for the Regional Sylvatic Rabies Conference at Billings September 17-19, 1974 at the Ramada Inn is now complete. Eight Northern States and three Canadian Provinces of the plains area have responded with plans for program and delegate participation.

Three Montana State agencies, the Department of Fish and Game, the Department of Health and Environmental Sciences and the Department of Livestock have combined efforts in sponsoring this regional effort for a goal of controlling skunk rabies in the most efficient way compatible with minimal environmental effects. Serving as Co-Chairman of this conference in which skunk rabies is the target, are J. Frederick (Fritz) Bell, M.D., Medical Director, Rocky Mountain Laboratory, Hamilton and Glenn C. Halver, D.V.M., State Veterinarian and Administrator, Animal Health Division, Department of Livestock, Helena.

Speakers and panel participants have been programmed from Canada and the United States. They are highly qualified to present information on skunk rabies research needs and improved methods of control in three areas of responsibility - public health, animal health and wildlife.

The Conference program will have five sessions of distinct interest. On the first day following keynote addresses, the eleven states and provinces will report on "Our Experience With The Skunk Rabies Program." A panel will then evaluate "Administrative Influences and Considerations As Related to Control Measures" from the standpoint of environment, public health, wildlife and livestock. On Mednesday, September 18, the program will include one panel "Methods Available For Population Reduction and Their Limitations" to be followed in the afternoon by another panel "Cooperative Research I Ksunk Rabies." Speakers will then discuss "Interagency Cooperation in Research and Control Within Regions" placing emphasis on potential capabilities of states and provinces to enter into regional compacts for those purposes.

A resolutions committee with three representatives from each of Alberta, Colorado, Iowa, Manitoba, Minnesota, Montana, Nebraska, North Dakota, Saskatchewan, South Dakota and Wyoming will consider numerous recommendations for regional administration and conduct of desired methods for skunk rabies research and control.

This conference promises to be very worthwhile for all Montana veterinarians and it is hoped they will find it possible to attend.

Meetings Scheduled To Explain DES Free Requirements Of Canada On Food Animals

The Montana Cooperative Extension Service and the MCDA Leterinary Services have jointly announced meetings in Montana to provide detailed information on shipment of livestock and meat into Canada to comply with the ban on DES (diethylstilbestral growth stimulant). Meetings will be held 1:30 P.M. in Butte September 5th, Billings September 6th, Sidney and Grac 5013 September 10th and Kalispell September 11, 1974.

These five meetings are intends, to provide feeders and producers of cattle and sheep detailed information on the requirements to be met for export of live feeder and slughter animals into Canada as well as meat carcasses, beginning September 15, 1974. Because

that trade will involve veterinarians, market officials and livestock dealers, they too are invited and encouraged to attend one of the five meetings.

To properly advise the Montana veterinarian of the details of this procedure, to the best of our understanding, the following guidelines are set forth:

- The bonafide producer and/or feeder must have attended one of the five "Export Seminars" at which time he will receive signed certificates by a USDA official.
- 2. He will then have a second certificate "Owner Certification of Animals" that will be completed by him certifying the catrie have been owned for 120 days and have not been fed or implanted with DES and that they have been individually identified with backtag or eartag (the latter we believe to be preferred for various reasons). All of this must be certified to by the attending veterinarian through his signature on the form. (Feeder cattle will be required to have the same tuberculin and serological tests as breeding cattle entering Canada all of which must be entered on the regular federal health certificates 17-140.)
- 3. Slaughter cattle and sheep can enter Canada with the "Owner Certificate of Animals" and the 17-140 health certificate with the endorsement of the U.S. Port of Entry USDA veterinarian. Feeder cattle and sheep with the owner certificate and the completed 17-140 must be endorsed at the Helena office.
- 4. Animals slaughtered at U.S. packing plants must be accompanied to slaughter with the same completed owner certificate and identification if the carcasses are to be eligible to enter Canada as meat.

New Appointment To Diagnostic Laboratory Staff

Dr. James Inhelder has accepted a position on the staff of the Diagnostic Laboratory, Bozeman effective September 2, 1974. His presence with Dr. Beck Hubbell, Chief and Dr. Mm. Quinn will enhance the proficiency of the laboratory in accomodating the increased number of specimens received for diagnostic service.

Dr. Inhelder received a B.S. from Northern Arizona University and his D.V.M. from Colorado State University in 1966. Following two years of practice he entered the University of Nebraska Graduate school as a Veterinary Research associate, receiving his M.S. in 1971. Since that time he has been a resident in Pathology at Cornell University as a candidate for the Ph.D. degree.

During his residency at Cornell, Dr. Inhelder was responsible for more than 2,000 cases which included necropsy and collating final diagnostic and clinical reports. His broad training and the advanced study in pathology will make Dr. Inhelder a valuable addition to the Diagnostic Laboratory Bureau.

Dierks Appointed Department Head, Veterinary Research Laboratory

An announcement was recently made by staff members of Montana State University that Dr. Richard Dierks had been named Department Head of the Veterinary Research Laboratory and Veterinary Science Department at Bozeman.

In commenting with favor on acquiring Dr. Dierks services, J. A. Asleson, Director of Montana Agricultural Experiment Station and J. E. Catlin Acting Head, VRL said:

"Dr. Dierks brings an outstanding record of accomplishments to the laboratory. He received a B. S. and D.V.M. from the University of Minnesota and later received an M.P.H. and a Ph.D. degree from the same institution. He is the recipient of numerous honors and awards in Veterinary Research. Dr. Dierks is diplomate of the American College of Veterinary Microbiologists and Diplomate of the American Board of Veterinary Public Health. He is a member of many professional and scientific societies and has studied and conducted research both in this country and abroad. His research background is in the area of Veterinary Virology and Bacteriology and work in this area has included study of respiratory diseases of cattle and rabies in animals. He has been involved in teaching and graduate education. In addition he has authored or co-authored medical professional papers both in the United States and foreign countries."

This Department is most pleased with the selection of Dr. Richard Dierks to fill the vacancy created by the resignation of Dr. W. W. Hawkins. Dr. Dierks will arrive September 15, 1974, from the Veterinary Medical Research Institute, College of Veterinary Medicine, Iowa State University. His vast knowledge and background will add great support to veterinary research in this state and will be of benefit to the further advancement of our Diagnostic Laboratory services, both of which are located in the Hadleigh Marsh Laboratory at Bozeman.

New Deputy State Veterinarians

Boyd Emond, D.V.M.
Michael J. Haaland, D.V.M.
Greg S. Lovgren, D.V.M.
Terry Lee Hall, D.V.M.
Clarence J. Siroky, D.V.M.
Cameron Mikkelsen, D.V.M.
John A. Beug, D.V.M.
L. T. Moxey, D.V.M.

Victor, MT.
Worden, MT.
Bozeman, MT.
Glendive, MT.
Butte, MT.
Beach, N.D.
Red Lodge, MT.
Sheridan, WY.



Page 1

AUTOPSIES PERFORMED REPORT

SPECIES	UMBER
Bat	7
Cat	
Cattle	
Chicken	18
Coyote]
Dog	3
Fetus:	3
Bovine	
Fox	
Goat	
Guinea pigMice	1
Skunk	
Swine	
Swifie	0
TOTAL AUTOPSIES PERFORMED	101



acteriological and Chemical Tests on Milk and Milk Products

PE OF TEST	IN COMPLIANCE	NOT IN COMPLIANCE
CTERIOLOGICAL TESTS:		
Butter:		
Coliform Counts	4	1
Yeast and Mold Counts	5	-0-
Buttermilk:		
Coliform Counts	9	-0-
Cheese:		
Coliform Counts	-0-	-0-
Yeast and Mold Counts	-0-	-0-
Cottage Cheese:		
Coliform Counts	8	2
Cream:		
Antibiotic Detection Tests	23	-0-
Bacterial Counts	21	2
Coliform Counts	20	3
Ice Cream and Ice Milk:		
Antibiotic Detection Tests.	14	-0-
Bacterial Counts	12	2
Coliform Counts	8	6
Ice Cream, Shake, and Milk Mix:		
Antibiotic Detection Tests	8	-0-
Bacterial Counts	6	- j-
Coliform Counts.	5	3
Milk: Raw for Pasteurization (Grade A)		
Annibiotic Detection Tests	186	-0-
Bacterial Counts	169	16
Brucella Abortus Ring Tests	186	-0-
C. liform Counts (No compliance standards; reported as IN COMPLIANCE)	191	-0-
Direct Microscopic Somatic Cell Counts	2	-0-
Milk: Raw for Manufacturing (Grade B) Antibiotic Detection Tests	-0-	-0-
Antibiotic Detection rests	-0-	-0-
	-0-	-0-
rucella abortus Ring Tests	-0-	-0=

Bacteriologic and Chemical Tests on Milk and Milk Products

TYPE OF TEST	IN COMPLIANCE	NOT IN COMPLIANCE
Bacteriological Tests (continued):		
Milk: Rer il Raw and Pasteurized Products Antihioric Detection Tests Bacterial Counts Brucella abortus Ring Tests. Coliform Counts Pasteurized Mily Containers: Bacterial >unts Coliform Counts	57 52 3 50 -0-	-0- 5 -0- 7 -0- -0-
Sherbet: Antibiotic Detection Tests Bacterial Counts Coliform Counts	2 2 2	-0- -0- -0-
Coliform Counts Yoghurt: Coliform Counts Other: (Specify)	6	-0-
Sour ½ & ½ Coliform Counts	1 -0- -0- -0-	-0- -0- -0- -0-
TOTAL BACTERIOLOGICAL TESTS	1,060	50
CHEMICAL TESTS: Butter Buttermilk. Cheese Cottage Cheese. Cream Tee Cream and Ice Milk.	5 2 -0- 6 20	-0- 7 -0- 4 -0-
Ice Cream, Shake and Milk Mix	4	4

Bacteriological and Chemical Tests on Milk and Milk Products

TYPE OF TEST	IN COMPLIANCE	NOT IN COMPLIANCE
Chemical Tests (continued):		
Milk: General Chemical *Mylsconsin Mastiris TestsRaw for Pasteurization (Grade A). *Mylsconsin Mastiris TestsRaw for Manufacturing (Grade B). Sherbet. Sour Cream. Yoghurt. Other: (Specify) Sour ½ % ½	46 187 -0 2 7 6 1 -0- -0-	10 2 -0- -0- 2 -0- -0- -0- -0-
TOTAL CHEMICAL TESTS	301	30
NOTAL RECTERIORGICAL AND CHEMICAL IESIS.		
* Values in mms		14 15 16 17 18

Dump200 200000	Service Management															-		
Values in mms		20	21	22	23	24	25	26	27	28	29	30	31	32	33	34 3	35	36
Samples Tested	6		1		0	0	Lol	1	01	0	ل ل		0	01	0	01	بلو	لــه
							,	-						,				
Values in mms	1	2	3	4	5	6	7 1	8	91	10	11	12	13	14	15	16 1	.7	18
Samples Tested	0	0	0_	101	0	0	0	_0_	0	01	0	0	0	0.1		01	ملم	
Values in mms			21	22	23	24	25	26	27	28	29	30	31	32	33	34 3	15 3	36
Samples Tested	0	0	0	0	0	0_	0	01	0	01	0	0	0	0	JL	01	010	

HEMICAL REPORT			-	o TEM			AGNESIUM		n	HOSPOR	OIIC	V	ITAMIN	1 /
	CALC:			ROTENE				Low		Norm			Norm	
OOD ANALYSE.	rigii Noi		IIIgii	4	1	2	7		2	5	6		3	2
Bovine		0		1			1	+		1 1	-	-	1	1
Equine		-	+											
Totals	9	6		5	1	2	8		2	6	6	1	4	2
·														
XICOLOGY ANALYSES					SENI			NIDE			EAD		STRYCH	
ovine:				Pos.		Neg	Pos.	N	eg.	Pos.	Neg.	P	05.	Neg.
B100d				-		-	-				2			
Kidney				-	-			+-	-		1 3			
Stomach contents				-		1		+			1			
Feces										1				
									-					
NINE: Stomach contents				-	-		1	+					3	3
Jeomach Contention											1			
UINE:					-		ļ				1-1			
B100d								+			+			
LINE:														
Stomach contents														
HER:					-			+-			1			
Barley cake						1								
Meat								_					1	
TOUTON ON														
TAL TOXICOLOGY						3				2	12		4	4
ALISES				-								-		
TER ANALYSES (M	+I. C		\						FIT	1011	ESTION.	ARIF	UNFIT	-
TER ANALYSES (Minerals for Live Nitrate Samples	estock cor	Sumpti	on)						5	1 90	1	NDLL	0111 21	
TDS Samples									l i				4	
									-				4	
Totals				• • • • • •		• • • • • •			6				4	87
OTAL ALL CHEMICA	AL AN	ALY	SES											8/

DIAGNOSTIC LABORATORY REPORT July, 1974

A. BOVINE --- 70 Specimens Submitted

I. DIAGNOSIS: LABORATORY

TEST/DIAG NAME		AMOUNT
Abomasul Ulcer		1
Autolytic Change		1
BVD Virus		1 3 1
Coccidiosis		
Congestion Pulmonary		1
Diarrhea - Neonatal		1 1 1 2
Edema		1
IBR Virus		2
Incomplete		14
Malignant Catarrhal Fever		1
Mastitis - Staphyloccus		3
Mouse Inoculation Enterotoxemi		!
NEO - Fibroma Neo - Fibrosarcoma		1
No Diagnosis		1 3 1 1 1 4
Paired Samples Not Submit		14
Parasitism		14
Pasteurellosis		1
Polioencephalomalacia		,
Sero - Anaplasmosis		i
Sero - Brucellosis		2
Sero - Leptospirosis		2 1 1 2 2
Specimen Unsuitable		ī
Tox - Dicoumarin		
Tox - Lead		i
Toxemia]]]
Trichomoniasis		2
Undetermined		26
Water, Unusable		1
	TOTAL	02

II. BACTERIOLOGY:

TEST DIAG NAME	AMOUNT
Bact - Aerobacter Sp. Bact - C1-Perfringen Bact - C1-Sp. Bact - C0-Dy. Bact - Cory. Renal2	1 1 1
Bact - E. Coli Bact - Past-Multocida	9
Bact - Proteus Sp. Bact - Salmonella sp.	, 7 1
Bact - Staph. Aureus Bact - Strep Sp.	5 7

Hematology Mouse Inoculation Enterotoxemi Myco - Sp. No Bacterial Growth Trichomonas Foetus	TOTAL	_	1 5 1 1 2
III. VIROLOGY:			
TEST/DIAG NAME		AA	MOUNT
Rabies - Negative	TOTAL	-	1
IV. PATHOLOGY:			
TEST/DIAG NAME		Al	TNUOM
Abomasul Ulcer Autolytic Change BVD Virus Congestion, Pulmonary Edema Encephalitis Malignant Catarrhal Fever Meningitis NEO - Fibroma NEO - Fibroma NEO - Fibroma No Visible Lesions Pasteurellosis Polioencephalomalacia Specimen Unsuitable Tox - Dicoumarin Toxemia Undetermined V. PARASITOLOGY: RESULTS	TOTAL		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
TEST/DIAG NAME		,	AMOUNT
Anaplasmosis Para - Eimeria Bovis Para - Strongyles	TOTAL		1 3 1
VI. SEROLOGY:			
TEST/DIAG NAME		POS	NEG
BYD Virus IBR Virus PI3 Virus		8 7 2	1 3 0

0 1 0 2 1 1 1 6 3 3 TOTAL 32	4 0 1 4 0 2 0 1 2 18
POS	NEG
3 1 3 3 1 1	0 0 0 0 0 0
	TOTAL 32 POS 3 1 1

B. EQUINE --- Specimens Submitted

Tox - Nitrate Water, Unusable

VII.

I. DIAGNOSIS: LABORATORY

TEST/DIAG NAME		TAUCMA
Adenovirus Cirrhosis Incomplete NEO - Fibrosarcoma NEO - Granuloma NEO - Melanoma Nephrosis Paired Samples Not Submit Para - Other Parasitism Sero - Leotospirosis Tox - Lead Undetermined	TOTAL	1 1 1 1 1 1 2 1 3 2 2 1
	TOTAL	20

TOTAL 15

II. BACTERIOLOGY: RESULTS

TEST/DIAG NAME AMOUNT
Bact - Bacillus Sp. 1

	Bact - Staph. Aureus Bact - Strep Sp. Undetermined	TOTAL	1 1 1 4
	III. PATHOLOGY: RESULTS		
	TEST/DIAG NAME		AMOUNT
	Adenovirus NEO - Fibrosarcoma NEO - Granuloma NEO - Melanoma	TOTAL	1 1 1 1 4
	IV. PARASITOLOGY: RESULTS		
	TEST/DIAG NAME		AMOUNT
	Para - Strongyles Para - Other Parasitism	TOTAL	2 1 1 4
	V. SEROLOGY: RESULTS		
	TEST/DIAG NAME	POS	NEG
	Sero - Canicola Sero - Ictero Sero - Leptospirosis	1 2 0 TOTAL 3	0 0 1
	VI. CHEMISTRY: RESULTS		
	Analysis - Mag - Norm Analysis - Calcium - Norm Analysis - Carotene - Norm Analysis - Carotene - Norm Analysis - Phos Norm Analysis - Vit A - Norm Tox - Lead Undetermined	POS 1 1 1 1 1 1 0 0 0 TOTAL 5	NEG 0 0 0 0 0 1 1
С.	PORCINE 10 Specimens Submitted		
	I. DIAGNOSIS: LABORATORY		
	TEST/DIAG NAME		AMOUNT
	Atrophic Rhinitis Diarrhea - Neonatal		2

Incomplete Meningitis Mulberry Heart Disease Pasteurellosis Pneumonia Sero - Leptospirosis Undetermined Virus Pig Pheumonia	TOTAL	1 1 1 1 1 1 2 1
II. BACTERIOLOGY: RESULTS		
TEST/DIAG NAME		TAUDOMA
Bact - Bacillus Cereus Bact - E. Coli Bact - Erysipelothrix Insidios Bact - Salmonella Sp. Bact - Strep Sp. No Bacterial Growth	TOTAL	1 4 1 2 1 2
III. PATHOLOGY: RESULTS		
TEST/DIAG NAME		AMOUNT
Atrophic Rhinitis Meningitis Mulberry Heart Disease Pasteurellosis Pneumonia Virus Pig Pneumonia	TOTAL	2 1 1 1 1 -2
IV. PARASITOLOGY: RESULTS		
TEST/DIAG NAME		AMOUNT
Ascariasis	TOTAL	1
V. SEROLOGY:		
TEST/DIAG NAME	POS	NEG
sero - Ictero	TOTAL 1	0
OVINE 2 Specimens Submitted		
I. DIAGNOSIS: LABORATORY		

D.

TEST/DIAG NAME		AMOUNT
No Diagnosis Undetermined	TOTAL	1 1 2
II. BACTERIOLOGY: RESULTS		
TEST/DIAG NAME		AMOUNT
Bact - C1-Sp. Bact - Staph. Aureus Bact - Strep Pyocenes	TOTAL	1 1 1 3
III. SEROLOGY:		
TEST/DIAG NAME	PC	S NEG
Sero - Brucellosis	TOTAL	0 1
FELINE 8 Specimens Submitted		
I. DIAGNOSIS: LABORATORY		
TEST/DIAG NAME		AMOUNT
Haemobartonella Sp. Hernia - Diaphragmatic NEO - Basal-Cell Carcinoma NEO - Lymphosarcoma Rabies	TOTAL	2 1 1 2 2 8
II. VIROLOGY: RESULTS		
TEST/DIAG NAME		AMOUNT
Rabies: Negative	TOTAL	2
III. PATHOLOGY: RESULTS		
TEST/DIAG NAME		AMOUNT
Hernia - Diaphragmatic NEO - Basal-Cell Carcinoma NEO - Lymphosarcoma	TOTAL	1 1 2 4
IV. PARASITOLOGY: RESULTS		
TEST/DIAG NAME		AMOUNT

Ε.

F.

		July,
Haemobartonella Sp.	TOTAL	P0S 2
CANINE 25 Specimens Submitted	TOTAL	-
I. Diagnosis: Laboratory		
TEST/DIAG NAME		AMOUNT
Dermatitis - Bact. Inflammation NEO - Adamantinoma NEO - Carcinoma - Squamous NEO - Fibroma NEO - Histiocytoma NEO - Mastocytoma NEO - Sarcoma - Undifferentiated No Diagnosis Otitis Para - Ancylostoma Sp. Para - Dirofilaria Immitis Rabies Sero - Leptospirosis Specimen Unsuitable Tox - Strychnine		1 1 1 1 1 1 2 1 2 4 1 1 5
Undetermined	TOTAL	<u>1</u>
	TOTAL	20
II. BACTERIOLOGY: RESULTS		
TEST/DIAG NAME		AMOUNT
Bact - E. Coli Bact - Proteus Sp. Bact - Staph. Aureus No Bacterial Growth	TOTAL	1 1 2 5
III. VIROLOGY: RESULTS		
TEST/DIAG NAME		AMOUNT
Rabies: Negative	TOTAL	4
IV. PATHOLOGY: RESULTS		
TEST/DIAG NAME		AMOUNT
Dematitis - Bact. Inflammation NEO - Adamantinoma NEO - Carcinoma - Squamous NEO - Histiocytoma NEO - Fibroma		1 1 1 1 1

NEO - Mastocytoma NEO - Sarcoma-Undifferentiated	TOTAL		1 1 8
V. PARASITOLOGY: RESULTS			
TEST/DIAG NAME			AMOUNT
Para - Ancylostoma Sp. Para - Dirofilaria Immitis	TOTAL		1 2 3
VI. SEROLOGY: RESULTS			
TEST/DIAG NAME			POS
Sero - Leptospirosis	TOTAL		1
VII. CHEMISTRY: RESULTS			
TEST/DIAG NAME		NEG	POS
Tox - Strychnine	TOTAL	2	3
AVIAN 13 Specimens Submitted			
** LABORATORY ASSIGN	MENTS **		
I. DIAGNOSIS: LABORATORY			
TEST/DIAG NAME			AMOUNT
Aspergillosis Bact - C-Pyogenes Def-Dis - Nonspecific Def-Dis - Perosis Gastric Ulcer Peritonitis Perosis Septicemia Undetermined			1 1 1 1 1 1
	TOTAL		13
II. BACTERIOLOGY: RESULTS			
TEST/DIAG NAME			AMOUNT
Bact - Cory. Sp. Bact - E. Coli Bact - Proteus Sp. Bact - Staph. Aureus Bact - Strep Pyogenes			1 3 2 1

Bact - Strep Sp. No Bacterial Growth	TOTAL	2 3 13
III. PATHOLOGY: RESULTS		
TEST/DIAG NAME		AMOUNT
Arthritis - Unknown Aspergillosis Def - Dis - Nonspecific Def - Dis - Perosis Histomonas Sp. Necrosis No Visible Lesions Peritonitis Perosis Septicemia Undetermined	TOTAL	1 1 1 1 2 1 1 1 1 2 1 1 1 1 2
WILDLIFE-102 Specimens Submitted		
I. DIAGNOSIS: LABORATORY		
TEST/DIAG NAME		AMOUNT
Rabies	TOTAL	101
II. VIROLOGY: RESULTS		
TEST/DIAG NAME		POS NEG
Rabies	TOTAL	2 99 2 99
III. PARASITOLOGY: RESULTS		
TEST/DIAG NAME		AMOUNT
Mites	TOTAL	1
OTHER 16 Specimers Submitted		
I. DIAGNOSTS: 'ABORATORY		
TEST/DIAG NAME		AMOUNT
		1
	TEST/DIAG NAME Arthritis - Unknown Aspergillosis Def - Dis - Nonspecific Def - Dis - Perosis Histomonas Sp. Necrosis No Visible Lesions Peritonitis Peresis Septicemia Undetermined	No Bacterial Growth III. PATHOLOGY: RESULTS TEST/DIAG NAME Arthritis - Unknown Aspergillosis Def - Dis - Nonspecific Def - Dis - Perosis Histomonas Sp. Necrosis No Visible Lesions Peritonitis Perosis Septicemia Undetermined WILDLIFE-102 Specimens Submitted I. DIAGNOSIS: LABORATORY TEST/DIAG NAME Rabies TOTAL II. VIROLOGY: RESULTS TEST/DIAG NAME Rabies TOTAL III. PARASITOLOGY: RESULTS TEST/DIAG NAME Mites TOTAL OTHER 16 Specimers Submitted I. DIAGNOSIS: 'ABORATORY

Mastitis - Staphyloccus No Diagnosis Para - Other Parasitism Specimen Unsuitable Undetermined Water, Fair Water, Good Water, Unusable	TOTAL	1 1 1 2 1 3 1 1
II. BACTERIOLOGY: RESULTS		
TEST/DIAG NAME		AMOUNT
Bact - E. Coli Bact - Staph Aureus Bact - Strep Sp. No Bacterial Growth	TOTAL	3 1 1 1 ————
III. PATHOLOGY: RESULTS		
TEST/DIAG NAME		AMOUNT
Coccidiosis Hydrocephalus Undetermined	TOTAL	1 1 1 3
IV. PARASITOLOGY: RESULTS		
TEST/DIAG NAME		AMOUNT
Para - Eimeria Bovis Para - Nematodirus Sp. Para - Other Para - Strongyles Parasitism Para - Coccidia	TOTAL	1 1 1 1 1 1
V. CHEMISTRY: RESULTS		
TEST/DIAG NAME		POS NEG
Specimen Unsuitable Tox - Lead Water Analysis: Nitrate Water, Fair Water, Unusable	TOTAL -	0 1 0 1 0 1 1 0 3 0 4 3

SEROLOGY REPORT

TEST	SPECIES	POSTIVE	NEGATIVE	SUSPICIOUS	TOTAL
Anaplasma CF Test	Cattle Cattle Goat . Sheep Cattle Horse Swine Goat Cream		530 330 2 17 11,592 3 2 59 5	49 43 3 17	579 373 2 20 11,609 3 2 59 5
rucellosis Seminal Plasma _eptospira borincana agglutination. " canicola " " grippo-typhosa " " hardjo "	Cattle		1 4 4 4 8	2	1 4 4 4 10
icterohemorrhagica " jules "	CattleCattleCattle	-0-	3 4 9	2	4 4 11



MONTANA VETERINARIAN'S ANIMAL DISEASE REPORT

JULY, 1974

DISEASES AND SPECIES:													
					INDEX	OF	COU	NTIE	S				
CATTLE:	1	3	7	11	14	15	20	21	24	25	26	28	30
Abscess													
Actinobacillosis			8	3	1			2					
Anaplasmosis		7		1	_	1	-	4					
Arthritis									_	-		1	
Bacillary hemoglobinura	1						1	<u> </u>			_	-	
Blackleg	-					1	1	3	1	1			
Cancer eye	5		11	4	2	1		2	-		_	_	_
Coccidiosis	-			<u> </u>		1		-	1				
Emphysema					_	1	_	-	-	-	-	-	_
Foot-rot		_			2	+	_		-		-	-	
Helminthiasis			-	-		-	-		-	-	-	-	
Infectious keratitis			-		-	+-	-	-	16	-	-	 	-
		-	-		-	-	-		10		-	-	-
Leptospirosis			-	-	-	+-	-		1		-	-	-
Listeriosis	-		-			+	-		1-				-
Mastitis			-			+	-	-	-		-	-	-
Pneumonia	4	-	-		-	+		-	-	-	-	-	-
Pulmonary emphysema	-		-		1	+	-	-	1	-	-	-	-
Rhinotracheitis		2	L			+-	-	350	-	1	-	-	-
Shipping fever			1		7	-	-	-	2	-	-	-	_
Ulcerative Stomatitis .			_			-	-	1	-		-	-	-
Urolithiasis		1				1	_						
Virus diarrhea				10		_	_			-		_	
Virus warts		_			6		_			_	_		
HEEP:		-				1							
Foot-rot			1				_	1				1	
WINE:													
Atrophic rhinitis								1		<u>L</u>			
Erysipelas						5							
ORSES:			T			1							
Bursitis						1				1			
Distemper	3		8	10	4	1			4				
Encephalomyelitis		1	1	1		1			1	T		1	
Infectious anemia												3	
Influenza		-	13		_	23	1	_	4		4	1	_
Purpura Hemorrhagica			1	-		1-0	-	_	1	1	1		$\overline{}$
Russian Knap Weed		1	-		1	+	+	+	1	1	1	1	†-
OGS:		-	+	-	1	+	1	-	1	1	1	-	1
Distemper	2	2	29	4		8		2	1	3			
Infectious hepatitis		-	1	1	-	1	-	1	+-	2	1	1	1
Leptospirosis	-		1	-	-	1	1	1	-	1-	-	1	+-
OULTRY:	-	-	+		-	+-	+	-	-	-	1	+	+-
Tuberculosis													1

DISEASES AND SPECIES:

CATTLE:					
Abscess	٠.	٠.			
Actinobacillos	is				
Anaplasmosis .					
Arthritis					
Arthritis Bacillary hemo	g1	ob	i	n	u:
Blackleg					
Cancer eye					
Coccidiosis					
Emphysema					
Foot-rot					
Helminthiasis					
Infectious ker					
Leptospirosis					
Listeriosis					
Mastitis					
Pneumonia	٠.			٠	٠
Pulmonary emphy	• •			•	•
Rhinotracheiti					
Shipping fever					
Ulcerative Stor					
Urolithiasis .					
Virus diarrhea					
Virus warts	٠.			٠	
SHEEP:					
Foot-rot					
SWINE:					
Atrophic rhini					
Erysipelas					
HORSES:					
Bursitis					
Distempter					
Encephalomyeli	tí	S			
Infectious ane	mi	a			
Influenza					
Purpura Hemorr Russian Knap W	ee	d.			
DOGS:					
Distemper					
Infectious hep	at	11	- 1	S	
Leptospirosis					
POULTRY:			ľ	ĺ	Ĭ
Tuberculosis .					

		INDEX	OF	COUNT	EES					
32	34	36	39	40	41	42	47	53	55	3
	-		-							
										3
	1	6								-
		-			2	-				
	2		1						_	
2	3		-			2	3			5:
				34	10					2
										5:
					10					
		2			1					
_						5				_
										_1
	2									-
					2					
										-
						-				-
						1				1
					15					
						1				_
					1				ļ	
	28	10	-		10					
		1			10					-
		-							_	-
			1				5	8		
	1									
	1		15		1	4		4		
						1				
						3_				-
									20	

DISEASES AND SPECIES:

	TOTAL	TOTAL
CATTLE:	CASES	HERDS
Abscess	2	1
Actinobacillosis	53	34
Anaplasmosis	20	11
Arthritis	9	6
Bacillary hemoglobinura	4	4
Blackleg	7	4
Cancer eye	86	54
Coccidiosis	65	6
Emphysema	1 1	1
Foot-rot	3	3
Helminthiasis	10	2
Infectious keratitis.	16	5
Leptospirosis	3	3
Listeriosis	6	2
Mastitis	10	6
Pneumonia	4	2
Pulmonary emphysema .	6	5
Rhinotracheitis	355	8
Shipping fever	10	4
Ulcerative Stomatitis	1	1
Urolithiasis	16	5
Virus diarrhea	10	4
Virus warts	11	4
HEEP:		
Foot-rot	15	10
WINE:		
Atrophic rhinitis	3	3
Erysipelas	6	2
ORSES:		
Bursitis	1	1
Distemper	86	43
Encephalomyelitis	5	5
Infectious anemia	3	1
Influenza	58	38
Purpura Hemorrhagica.	1	1
Russian Knap Weed	1	1
OGS:		
Distemper	83	78
Infectious hepatitis.	6	6
Leptospirosis	6	4
OULTRY:		
Tuberculosis	20	1
TOTAL CASES AND HERDS		369
TOTAL CASES AND HEADS	1002	

. (1-1

ANIMAL MORBIDITY REPORT July, 1974

INDEX OF COUNTIES

NO. COUNTY	NO.	COUNTY	NO.	COUNTY
1 Beaverhe	ad 20	Granite	39	Powe 11
2 Big Horn	21	Hill	40	Prairie
3 Blaine	22	Jefferson	41	Ravalli
4 Broadwat	er 23	Judith Basin	42	Richland
5 Carbon	24	Lake	43	Rooseve1t
6 Carter	25	Lewis & Clark	s 44	Rosebud
7 Cascade	26	Liberty	45	Sanders
8 Chouteau	27	Lincoln	46	Sheridan
9 Custer	28	Madison	47	Silver Bow
10 Daniels	29	McCone	48	Stillwater
11 Dawson	30	Meagher	49	Sweet Grass
12 Deer Lod	ge 31	Mineral	50	Teton
13 Fallon	32	Missoula	51	Toole
14 Fergus	33	Musselshell	52	Treasure
15 Flathead	34	Park	53	Valley
16 Gallatin	35	Petroleum	54	Wheat land
17 Garfield	36	Phillips	55	Wibaux
18 Glacier	37	Pondera	56	Yellowstone
19 Golden V	alley 38	Powder River		

Alaska.

EXCERPTS AND SUMMARIES OF CHANGES IN PROGRAMS OR REGULATIONS AFFECTING MOVEMENT OF LIVESTOCK

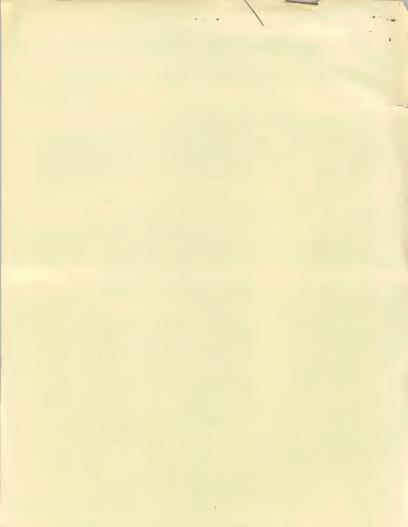
Oregon Requires Permits On All Livestock

Montana veterinarians have been criticized for issuing health certificates on livestock destined for Oregon without first having a permit from that state. We have been advised by Dr. Glenn B. Rae, Administrator, Veterinary Division, Oregon Department of Agriculture, Salem that they have twenty-four hour telephone permit service. Please call 503-378-4710 for a permit for any livestock on which you plan to write a health certificate for an Oregon destination.

States and Canada Requiring EIA (Coggins) Test For Entry

Tested if through Canada within 6 months prior to entry.

MIASKA	rested in thiodyn canada within a months prior to thery.
Canada	Tested within 6 months prior to entry.
Delaware	Tested if to sales.
Florida	Tested within 6 months prior to entry.
Georgia	Tested within 6 months prior to entry.
Illinois	Tested within 12 months prior to entry.
Kentucky	Tested within 6 months prior to entry.
Louisiana	Tested within 6 months prior to entry.
Maine	Tested if to track.
Maryland	Tested if to track.
Massachusetts	Tested within 6 months prior to entry.
Mississippi	Tested within 6 months prior to entry.
New Jersey	Tested within 6 months prior to entry.
New York	Tested within 12 months prior to entry.
North Carolina	Tested within 6 months prior to entry.
Ohio	Tested within 6 months prior to entry.
South Carolina	Tested within 6 months prior to entry.
Vermont	Tested within 6 months prior to entry.
Washington	Tested within 6 months prior to entry.
West Virginia	Tested within 6 months prior to entry.



5 636.05 630.05 6000 6000 6000 6000



STATE OF MONTANA

DEPARTMENT OF LIVESTOCK

Animal Health Division

Helena, Montana 59601

OCTOBER

MONTHLY LETTER

1974

BOARD OF LIVESTOCK

R. M.	SIMONS, (Chairman.	 	 Turner
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F. J0	HNSTON		 	 eat Falls

G. C. HALVER, D.V.M.

Administrator and State Veterinarian



MONTANA DEPARTMENT OF LIVESTOCK Animal Health Division Helena, Montana 59601

MONTHLY LETTER - OCTOBER, 1974

FERLICKA TRAINED IN FOREIGN ANIMAL DISEASES

Dr. D. P. Ferlicka, District Deputy State Veterinarian of Helena has completed the USDA training course for the detection and diagnosis of foreign animal diseases. The course included two weeks of intensive lecture reviews of exotic diseases at National Animal Disease Center in April and six days in September at Plum Island, New York dealing with the clinical observation of animals actually affected with important exotic diseases.

In summarizing the familiarization he received with foreign animal diseases and the laboratory procedures used in their definitive diagnosis, Dr. Ferlicka said "...the virulence of most strains of exotic disease agents is a stark reminder of the devastation they are capable of inflicting on our domestic animals. For almost every exotic disease there is an analogue endemic to the U.S. capable of masking an introduced exotic agent for a dangerously long time. Internationally the concept of dangerous animal diseases is heavily influenced by national traditions and social orientation."

The Montana Department of Livestock appreciates the opportunity afforded Dr. Ferlicka by the staff members of USDA Veterinary Services in selecting him as a candidate for this course.

In Montana, the mechanisms are available to diagnose and surround a dangerous disease. The foreign animal disease training afforded previously to resident USDA veterinarians and now a state veterinarian provides us with the updated acuity in field differential diagnosis with supportive provisions for laboratory diagnosis. The key to rapid implementation of these mechanisms continues to be an enlightened livestock producer and an alert veterinary profession. We intend that Dr.Ferlicka's knowledge will in turn be carried to producers and veterinarians of Montana to better support this doctrine.

"WEAK CALF SYNDROME" SYMPOSIUM - SALMON, IDAHO

The Weak Calf Syndrome (WSC) of Western Montana and Northern Idaho was the subject of discussion at a symposium sponsored by the University of Idaho. The meetings were held in Salmon on September 24-25, 1974. Research topics were discussed by numerous investigators of the WCS on September 24 and the morning of the 25th. The theme of the second session was a review of the WCS research efforts, new information obtained to date and plans for additional research in the next calving season.

The broad roster of participants is indicative of the interest in the problem. Representatives of veterinary research, practice, extension, disease control and

diagnostic laboratories from California, Idaho, Montana, Washington, Wyoming and the National Animal Disease Center (NADC) Ames, Iowa met for a review of the WCS Montana's contributions to this symposium were: Confirmed PI3 virus isolations from calves in WCS herds; new approaches in the treatment of weak calves, and the epidemiologic data for the 1974 calving season obtained from the continued surveillance of the randomly selected herds in Beaverhead and Ravalli counties. The Montana epidemiologic data are being assembled for the "WCS Surveillance Report Number Two" which will be available for distribution within the next few weeks.

REPORT ON REGIONAL SYLVATIC RABIES CONFERENCE

The Regional Sylvatic Rabies Conference at Billings September 17-19, 1974, was attended by about 85 people from nine states and three Canadian provinces. Federal government representatives attended from Canadian Agriculture Health of Animals Division, USDA Veterinary Services, Department of Interior Fish and Wildlife Service, H.E.W. Center for Disease Control and E.P.A. Representatives from States and provinces included agencies of Fish and Game, Health and Livestock. There were no participants defending wildlife at this conference which was announced and conducted as open to the public.

Seven resolutions were adopted in open session of the rabies conference:

- An eleven state-province regional meeting of laboratory diagnosticians be held within twelve months to improve laboratory methods and reporting of rabies diagnosis.
- 2. To pursue regional exchange of information on rabies control and research through a monthly or quarterly bulletin.
- 3. To establish within each state and province a rabies advisory committee of representatives of animal health, public health and wildlife to more effectively coordinate the variety of activities necessary for the protection of man and animals from rabies.
- 4. To request that the Environmental Protection Agency be encouraged to relax the conditions under which toxicants can be used for skunk population reduction in order that effective control measures to prevent the spread of skunk rabies can be implemented.
- To urge conference participants to support passage of legislation at provincial, state and local levels forbidding and penalizing the importation and sale of skunks as pets.
- To establish an interstate Bi-National Sylvatic Rabies Commission for the purpose of formulation and implementation of a viable regional cooperative approach to the solutions of sylvatic rabies problems and to reconvene within twelve months.
- To adopt a standardized surveillance program within the participating states and provinces to acquire information on the epidemiology of human rabies exposure and treatment response.

James H. Steele, D.V.M., School of Public Health, University of Texas, in a conference summation called for:

- 1. Regional research studies on striped skunk populations.
- Research on virus identification in sylvatic animal species for variances.
- Long-range funding of wildlife rabies research to avoid the interruption of such studies as has historically occurred.
- Attainment of bi-national cooperative consideration and action on the common problem of skunk rabies as has been achieved by coalitions between Mexico and the U.S. on the International border of Southwest U.S. for control of canine rabies.
- Establish a viable regional commission to maintain research and control efforts of sylvatic rabies on a long-range program that can be adequately supported.
- 6. Look to established research centers for implementing and sustaining wildlife rabies research. He strongly recommended that Rocky Mountain Laboratory at Hamilton, Mortana be encouraged to participate in rabies research as a zoonotic disease, the kind of research which that laboratory has fostered since its founding for study of Rocky Mountain Spotted Fever.
- 7. Provide the public with informative rabies material and cooperate with school administrators by furnishing class-room educational material for children as has been done in South Dakota to create awareness to rabies and minimize the risk of the public to wildlife rabies exposure.

To sustain interest in the goals of the conference and to pursue the formation of a Bi-National Sylvatic Rabies Commission, Dr. James Glosser of Montana was named as Interum Chairman and Dr. Myron F. Andrews of North Dakota will serve as Interum Secretary until the next regional meeting.

VETERINARIANS DISEASE REPORT - CHANGE OF COUNTY INDEX

To coordinate the use of county numbers as an index of disease surveillance in Montana counties, the county license plate number will be used in reporting the information on the Montana Veterinarians Animal Disease Report. This coincides with the recent change made for county identification key on submissions to the Diagnostic Laboratory. Silver Bow County now becomes Number 1 instead of Number 47 on the alphabetical list.

Response by Montana veterinarians completing the disease cards mailed to them by this Department is less than fifty percent. We recognize that to some veterinarians the entering of those reportable animal diseases seen in their practice may be for no good purpose and therefore, a waste of time.

If this viewpoint exists, we defend the right to seek this information from our

Montana veterinarians for several reasons. From no other source is it possible to achieve estimates for accounting of animal diseases and the population involved. Such figures, when made to be a measurement of disease of the whole population, become viable indices for computing total losses and costs to producers and for appraising need of research or programs for control. Summaries of laboratory reports help in this area, but are short in the numbers of affected population.

Veterinarians hold the key to livestock industry needs for the best assessment of their disease losses. When numbers of that industry inquire for need of animal research, trends of disease incidence and a veterinary approach to justifiable remedy, they should have the benefit of something better than the contribution of only half of Montana's veterinarians.

Please! Will the veterinarians receiving Animal Disease Report cards respond with more complete information. In turn we at administrative level will endeavor to update the card by abandoning archiac terminology and thereby solicit your reports of specific disease observations.

AUTOPSIES PERFORMED REPORT

SPECIES	NUMBER
Catle. Cattle. Chicken. Fetus: Bowine. Equine. Fox. Gopher. Mouse. Raccoon. Sheep. Skunk.	
Cattle. Chicken Fetus: Bovine Equine Fox. Copher. Mouse. Raccoon Sheep. Skunk	2
Chicken. Fetus:	
Fetus: Bovine. Equine. Fox. Gopher. Mouse. Raccoon. Sheep. Skunk.	
Bovine. Equine. Fox. Gopher. Mouse. Raccoon. Sheep. Skunk.	
Equine. Gopher. Mouse. Raccoon. Sheep. Skunk.	
Fox. Gopher. Mouse. Raccoon Sheep. Skunk Squirrel	
Gopher. Mouse. Raccoon. Sheep. Skunk. Squirrel.	
Mouse. Raccoon. Sheep. Skunk. Sauirrel	
Raccoon Sheep. Skunk Souirrel.	
Sheep	
Skunk	
Squirrel	
Squirrel	
Swine	
TOTAL AUTOPSIES PERFORMED	FORMED



SUMMARY OF THE LABORATORY REPORT FOR AUGUST, 1974

The Diagnostic Laboratory processed 266 accessions during the month of August, 1974. The breakdown by species, showing the number of accessions, the number diagnosed, and the percentage of diagnosis is as follows:

Species	No. Acc.	Diagnosis	Percentage Diag.
Bovine	108	50	46%
Equine	26	18	69%
Porcine	13	9	60%
Ovine	5	2	40%
Feline	18	16	88%
Canine	24	18	85%
Avian	9	4	44%
Wildlife	42	40	95%
Other	21	17	80%

Many bovine accessions are reported out as undetermined or incomplete because of the lack of paired serum samples. The laboratory does not make a diagnosis of BVD, 1BR, $\rm PI_3$ or leptospirosis unless paired serum samples are submitted within a 3-week interval.

The bulk of the canine and feline specimens involve poisoning, rables suspects, and neoplasms. Almost all the wildlife specimens were submitted for rables diagnosis.

In the bowine category, there was nothing unique in the disease problems for august. Most frequent bacterial isolations involved $\frac{\text{Staph. aureus}}{\text{Staph. aureus}}$ and $\frac{\text{E. coli.}}{\text{Seventeen}}$ Neasurable IBR and BVD titers are still common in $\frac{\text{Hontana cattle serums.}}{\text{Seventeen}}$ Seventeen serum samples were found to contain positive $\frac{\text{L. icterhemorrhagica}}{\text{L. icterhemorrhagica}}$

Two equine specimens were processed at NADL for rhinopneumonitis and both were found to be negative. L. <u>ictero</u> was also found to be causing high titers in two equine, one showing rather severe clinical signs.

Porcine and ovine submissions were minimal, and nothing remarkable was noted in either species from a disease standpoint.

Nine of the 18 submissions for feline involved rabies suspects. Several submissions involved panleucopenia. As was noted, most canine submissions involved neoplasms, rabies suspects, and poisonings. A <u>Sarcoptes scabel</u> v. <u>canis</u> was confirmed from a dog in the Billings area. No history was submitted concerning the circumstances involved.

Forty-one of the 42 wildlife accessions involved rabies examinations. Sixteen submissions were for bats. All 41 specimens were negative for rabies.

Most of the "other" accessions involved water analysis for livestock use. Of 14 analysis, 6 specimens were either "poor" or "unsuitable" for livestock use.

As might be expected, Gallatin County led all counties in number of accessions submitted with 36. Yellowstone County followed with 26 submissions. Ravalli and Garfield counties submitted 15 each. Only Lincoln, Petroleum, Mineral, Golden Valley, Wibaux, Liberty, Carter, Judith Basin, Sanders, Deer Lodge, Madison, and Toole counties failed to be represented with laboratory submissions. Some of these counties do not have a practicing veterinarian within its boundaries.

With the addition of Dr. Inhelder to our staff, we are looking forward to being able to offer 72-hour service on histopathology work in the immediate future. New Final Report Forms are in the process of being printed, and barring unforeseen problems, should be available for use in a month or so. Many of you might already have received informal "Preliminary Reports" from the laboratory, reporting on the progress of specimens received at the laboratory. We are hopeful that this will keep you better informed of what is being done in the laboratory and will also alert you of any delays or problems encountered. We are still experiencing some problems in that a few veterinarians are not furnishing us a complete history, including sex, age, number in herd, etc. PLEASE FILL OUT THE SV 43 FORMS AS COMPLETELY AS FOSSIBLE. Again, please feel free and welcome to call the laboratory on any problems you might encounter or any questions you might have regarding our capabilities.

SEROLOGY REPORT

TEST			SPECIES	POSITIVE .	NEGATIVE	SUSPICIOUS	TOTAL
			Cattle		457	9	466
Anaplasma	CF		"		367	54	421
*Bluetongue			Cattle		14.063	42	14,105
		tion	-14)	71	2,073		2,144
11	11 11		rket) "	11	8	1	8
11	†1 1†		Goat		10		10
11	11 11		Horse				3
11	11 11		Swine		3		
11	U II	(Card - Diag. Lab.) "		48		48
11	11 11		rket) "		109		109
an to a Tod	a - til aug Anomin (Coggins Test)		6	452		458
vedurus rur	ections Anemia (tination	Cattle		11		11
Leptospira					11		11
	canicola				11		11
11	grippo-typhosa				11		11
11		ation			11		11
11	hebdomadis "				12	1	13
11	icterohemorrhag	ia agglutination				1	11
11	jules agglutina	tion	"		11		
11	pomona "				17	1	18
TOTAL CERO	TOCY TROTS			77	17,685	107	17,869

^{*} Test results reported from various out-of-state laboratories.



MONTANA VETERINARIANS " ANIMAL DISEASE REPORT

AUGUST, 1974

/eterinarians Reporting	32	Cou	nties	Rep	ort	ing.				30 Di	seases	Repo	orte
EASES AND SPECIES:	-	MI W. 20			- ASTAGE	A50	COUN			- Constant			njajak
TLE:	1	2	3	14	DEX 5	7	8	19	111	12	113	T14	11
Actinobacillosis	10	8	40	-	-	-	-	-		2	123	177	-
Anaplasmosis	-	-		1	-		-	9	10	-	1	+	+
Arthritis	-	-	8		-		-	1	10	-	+	+	+-
Bacillary hemoglobinuria		-		2	1	7	-	+	1	-	6	-	+
Blackleg	-	-	1	-	-	2	-	1	-	-	10		+
Brisket edema	-	-		-	-			1	-	-	-	-	+
	7	4	37	-	-	2	-	-	-	 	-		+
Cancer eye	/	4		1	-		-	-	-	1	-	+	+
Coccidiosis	-	-	10		-	2	-	-		19	-	+	+
iptheria	-			-	-		-	-	-	-	-	-	+
oot-rot	-	-	6	-	-		1	-	-	-	-	-	+
lelminthiasis	-	-			-		-	-	1	-	10		+
eptospirosis		-		-	_		_	2	2	2	14	1	1
astitis	-	-	25	-	_								L
etritis		-	4	_	_								L
ulmonary emphysema			3	7	1	_1	1		1				L
hinotracheitis											1		I
ingworm			3										T
ipping fever				I			5				1		T
lithiasis			5			3			1		1	1	T
us diarrhea								1			4	1	T
			1				T	T					T
erotoxemia								1		1			
t-rot							1	T	1		100		T
					Г			1				1	T
pic rhinitis		1	9	1				1					
sipelas				T		3					1		T
tospirosis								T					T
: 1									1	1	1		1
temper			3		3	12	32	1	1		3		1
ephalomyelitis				T	1			T	1	1			1
ectious anemia						1		1		1	1	1	1
luenza				4	4	15		1	1	1	111		\top
		1	1	1	1			1	-	1	1	+	+
stemper	20	20	1	4	19	2				3	4		
fectious hepatitis	1	1		1	3		1	1		1	+	1	+
tospirosis	1	-		1	1		-	1		1	1	1	+
son	-	-	-	-	-		-	+	1	-	+	+	+
coptic mange	-	-		1	-			-	-	-	+	+	+

DISEASES AND SPECIES:	No. of Contrast of											
CATTLE:	16	119	20			COUNTI			10-		1	1
Actinobacillosis	2	119	20	21	24	27	28	29	35	37	39	44
Anaplasmosis		3	-	4	1	1	-	2	-	-	1	
Arthritis		+-	-		1	-	-		-		-	1
Bacillary hemoglobinuria		+	-			-	-				1	-
Blackleg		+	+	-	-	-	-			-		
Brisket edema		-		-		-	-					
Cancer eye	5	+	5		-	3	-					-
Coccidiosis	50	+	+	-	1	3	-		-	-		+-1
Diptheria		+	+		-	-	-		+			
Foot-rot		+	-		 	-		6	-		2	+-+
Helminthiasis		+	-	 	1		-	- 0			1-	
Leptospirosis	1	+	+			-					-	4
Mastitis		+	+			-			-	-		++
Metritis		+	+	-					-		-	-
Pulmonary emphysema		+	+		11	8		22	4			-
Rhinotracheitis		+	+	-	111	10		1	+		-	-
Ringworm		+	+	-	-		-					-
Shipping fever		+	+		-	-			-		-	4
Urolithiasis		+	+		2	2	-		-	1		1
Virus diarrhea		-	+-			1	1	1		 	-	
SHEEP:		+	+			1	-	1	-		-	+
Enterotoxemia		1					1		1		1	
Foot-rot		+	+			-			+	-	+	+
SWINE:		-	+	-			+		+			+-1
Atropic rhinitis		-	1		ļ							1 1
Erysipelas		+	1 2	 		-	-		-			+-+
Leptospirosis		+	+	-	-		-		+	1		+
HORSES:		+	+	-	-		-		+	1		
Distemper		1	1			1	14			1		
Encephalomyelitis		+	+	-		-	114	2				+
Infectious anemia		+	-		-	+	+		+	-	-	+
Influenza		+	+	-		+	+		+	4		+-1
DOGS:		+		-	+		-		-	1 4	-	+
Distemper			12		1	1	6	1				2
Infectious hepatitis.		+	112		-	+	1-0-		+			+-
Leptospirosis		+	+	-	-		+		1		-	+
Poison		-	1	-	1	1	-		1	-	-	10
Sarcoptic mange		1	1		1	1	_	-	+	-	+	1
		+		-	+	-						-

DISEASES	AND	SPECIES:

		TNDE	UF	COUN				1	TOTAL	IUIAL
CATTLE:	47	48	49	51	52	53	56		CASES	HERDS
Actinobacillosis	1							-	69	43
Anaplasmosis			1	4		1			32	16
Arthritis									9	5
Bacillary hemoglobinuria									15	9
Blackleg				6					10	4
Brisket edema			3						3	3
Cancer eye	5								70	41
Coccidiosis				2					87	14
Diptheria					3				3	1
Foot-rot									15	10
Helminthiasis									11	3
Leptospirosis									27	8
Mastitis									25	16
Metritis									4	2
Pulmonary emphysema				1					58	19
Rhinotracheitis									2	2
Ringworm		1							3	2
Shipping fever									9	6
Urolithiasis				1					17	13
Virus diarrhea					1				7	6
SHEEP:					-					
Enterotoxemia				65					65	1
Foot-rot		1							100	1
SWINE:									100	-
Atropic rhinitis									9	6
Erysipelas		4	2	2	1				14	7
Leptospirosis									1	1
HORSES:										
Distemper			3				1		71	20
Encephalomyelitis									8	8
Infectious anemia									1	1
Influenza				6		2			46	32
DOGS:		1	1							
Distemper									96	91
Infectious hepatitis			1		1				5	3
Leptospirosis	-	1		1		1			1	1
Poison		1-	1	1	1				10	10
Sarcoptic mange		1	_			1			1	1
parcobere mange		1	1	1	1	1	1			
TOTAL CASES AND HEPDS	1		1						904	406
TOTAL CASES AND HERDS									904	406

MONTANA VETERINARIAN'S ANIMAL DISEASE REPORT

INDEX OF COUNTIES

NO.	COUNTY	NO.	COUNTY	NO.	COUNTY
1	Silverbow	20	∀alley	30	Fallon
2	Cascade	21	Toole	40	Sweet Grass
3	Yellowstone	22	Big Horn	41	McCone
4	Missoula	23	Musselshell	42	Carter
5	Lewis & Clark	24	Blaine	43	Broadwater
6	Gallatin	25	Madison	44	Wheatland
7	Flathead	26	Pondera	45	Prairie
8	Fergus	27	Richland	46	Granite
9	Powder River	28	Powe11	47	Meagher
.00	Carbon	29	Rosebud	48	Liberty
1	Phillips	30	Deer Lodge	49	Park
12	Hi11	31	Teton	50	Garfield
13	Ravalli	32	Stillwater	51	Jefferson
14	Custer	33	Treasure	52	Wibaux
15	Lake	34	Sheridan	53	Golden Valle
16	Dawson	35	Sanders	54	Mineral
.7	Roosevelt	36	Judith Basin	55	Petroleum
18	Beaverhead	37	Daniels	56	Lincoln
9	Chouteau	38	Glacier		

EXCERPTS AND SUMMARIES OF CHANGES IN PROGRAMS OR REGULATIONS AFFECTING MOVEMENT OF LIVESTOCK

Better Service In Histopathology

Following is a statement made by Dr. Beckwith Hubbell, Jr., Chief, Diagnostic Laboratory Bureau, Bozeman. We are reproducing it for its merit in advising Montana veterinarians as to the anticipated benefits in having Dr. Jim Inhelder as a new staff member:

"...On September 1, 1974, an additional veterinarian was added to the laboratory staff. His name is Jim Inhelder, who received training in veterinary pathology at Nebraska and Cornell following graduation from Colorado State University. Jim is looking forward to being of service to the veterinarians and livestock owners of the state.

With this staff addition, it is anticipated that laboratory time in reporting histopathology will be markedly shortened. If the tissues are submitted to the laboratory fixed in 10% formalin, this will also result in faster reporting. When it is desired that results be reported by telephone, the number and request should be placed on the SV 43.

If there are any questions about specimen submission or laboratory capabilities, do not hesitate to call 586-5952."

CALIFORNIA: Change in Brucellosis Requirements - effective 9-12-74

Female Dairy Cattle

- A permit must be obtained prior to bringing any female dairy cattle into California. Write the Bureau of Animal Health, 1220 N. Street, Sacramento, California 95814, or telephone (916) 445-4191.
- The health certificate must show an ear tag number, the exact calfhood vaccination tattoo for each animal in the shipment as well as the date and results of a brucellosis test of all animals over 20 months of age.
- Replacement heifers returning to California are exempt from the test requirements provided they have a legible tattoo in their <u>right</u> ear and have not commingled with other cattle. A permit and a health certificate are necessary however.
- Calves under 3 months of age and cattle destined for immediate slaughter are exempt from the vaccination and test requirements.



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(California)

Female Beef Cattle

A negative 30-day blood test is required of all female beef animals except (1) vaccinates under 24 months of age, (2) slaughter cattle, (3) feeder cattle under 18 months of age, (4) cattle that are native to the far western states of Arizona, Nevada, Oregon, Washington, and that part of Idaho west of Highway 93.

NEVADA: Cattle - Change in Brucellosis Regulations - effective 9-21-74

Special permit and negative test on feeding, breeding and stocker cattle from Modified Certified Brucellosis Free areas. Those cattle from Certified Brucellosis Free areas as in Montana are exempt from permit and test requirements.

NORTH CAROLINA: Horses: Change to Require Coggins Test - effective 10-15-74

Negative official test for Equine Infectious Anemia within six (6) months prior to entry.

OREGON: Cattle - Change in Brucellosis Regulations - effective 10-11-74

All eligible cattle must have a prior permit and be tested negative for brucellosis during a 30 day period prior to entry. Subject to quarantine separate and apart from other cattle at destination and retest not sooner than 30 days nor longer than 60 days after importation at owners expense. Eligible cattle include brucellosis vaccinated beef cattle over 24 months and dairy cattle over 20 months and all other female cattle including springers and post parturient and bulls over eight months.

Horses - Negative Coggins Test

All equidae must have had a negative equine infectious (EIA) test during the previous \sin months if over \sin months of age.

Dogs - Cats and Small Pets

Oregon permit must be obtained for all dogs cats and small pets before entering Oregon by commercial carrier for breeding purposes or for resale.

Permits

TEXAS: Changes in Regulations 8-22-74



(Texas)

Health Certificates - Must be issued within 10 days prior to date shipment enters the state.

Cattle - Brucellosis

All cattle must be accompanied by health certificates showing individual identification - ear tag, fire-brand, tattoo. Cattle originating from non-quarantined herd in Certified Brucellosis Free area are exempt from test.

Equine Coggins Test

All equidae must be negative to Coggins test within six months prior to entry and test form copy to be attached to Health Certificates.

VEE Vaccination

Required on all horses showing date of vaccination. (No stipulation as to duration of vaccination)

Dogs - Cats and Exotic Animals

Rabies immunization within twelve months prior to entry; dogs under four months exempt.

(THE END)







TIGHT Y ATT

OTICE TO MONTANA VETERINARIANS

IMPORTANT

POLICY CHANGE IN NOTIFICATION OF LABORATORY RESULTS

November 12, 1974

The Board of Livestock at their meeting on November 7, 1974, directed the Diagnostic Laboratory, Animal Health Division to mail a copy of the new "Final Laboratory Report" (SV Form 51) to the owner as well as to the attending veterinarian.

On this new form, "Comment" will appear on the veterinarians copy in some cases following the "Diagnosis" --", but in each case those "Comments" will be omitted from the owners copy. This section is reserved for communications of a professional and/or personal nature relating to interpretations, differential diagnoses, and additional diagnostic procedures.

No attempt will be made by the Laboratory to interfere with the veterinarian-client relationship through these reports. These reports will retain precise medical terminology and no attempt will be made to "simplify" the report. To avoid a communicative misunderstanding on the matter of diagnosis, an insert will be enclosed with the owners copy that will read:

"This final laboratory report, summarizing findings made on specimens submitted by your veterinarian, carries a "Diagnosis". In some cases the laboratory diagnosis may differ from the field diagnosis made by your veterinarian. When there is a difference, both may be correct. Most of these final reports should be discussed with your veterinarian because of the specific terms used in relating to laboratory findings."

This policy change comes as the reaction of several Board members to a number of complaints they received from livestock producers relating to the responsiveness of this Laboratory. This Directive is not the result of professional differences by the laboratory veterinarians and the practicing veterinarians.

DEPARTMENT OF LIVESTOCK

GLENN C. HALVER, D.V.M. Administrator & State Veterinarian



STATE OF MONTANA

DEPARTMENT OF LIVESTOCK

Animal Health Division

Helena, Montana 59601

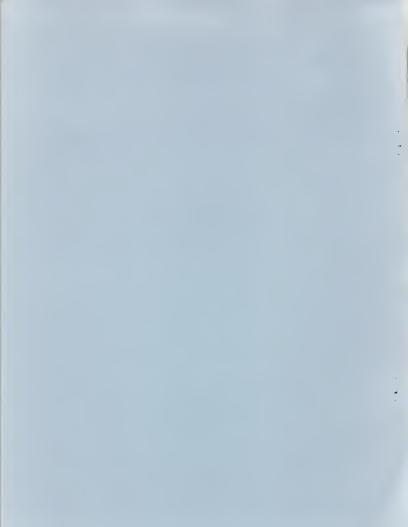
SHELVED WITH'
PERIODICALS'

BOARD OF LIVESTOCK

R.	M. SIMONS,	Chairman	 Turner
т.	EVANS		 Stanford
		S	
Ι.	BLANKENSHII	P	 Dayton, WY
B	I. DESCHAM	PS, Jr	 Browning
	TOTALCHON	_,	Great Falls

G. C. HALVER, D.V.M.

Administrator and State Veterinarian



MONTANA DEPARTMENT OF LIVESTOCK Animal Health Division Helena, Montana 59601

MONTHLY LETTER - NOVEMBER, 1974

ANTHRAX IN RICHLAND COUNTY HERD

A field diagnosis of Anthrax was made in mid-October by Dr. Howard K. McNew, veterinary practitioner of Sidney, in a Richland County beef herd where three cows had suddenly died. Specimens submitted to the Diagnostic Laboratory at Bozeman were culturally positive for <u>Bacillus</u> anthrais.

This Northeastern Montana County had Anthrax losses in the summers of 1957 and 1961 in several herds on other creek drainages. An outbreak in October is an unusual occurrence of that disease in Montana. Dr. McNew and Dr. H. A. Brosz, District Deputy State Veterinarian suggest that exposure may have occurred in these cattle because of chewing old bones. This highly alkaline summer range where the cattle do not accept phosphorus supplements free-choice, is a part of a historically identified anthrax area.

The more than two-hundred head of cattle in the herd have been vaccinated with Sternes Strain vaccine, and are presently under quarantine. Adjacent herds are under close surveillance and because air-borne insect activity is almost nil,those herds are not expected to be involved. The carcasses of the three dead cows have been burned along with bones that could be collected in the pasture.

BRUCELLOSIS INCREASES IN MONTANA AND THE U.S.

Brucellosis continues to pose a threat to Montana cattlemen. Presently, there are 17 Montana herds quarantined because of known infection with the Brucella abortus biotype I organism. The number of infected herds has varied from 666 herds July 1, 1957 to seven July 1, 1972. A cumulative total of 20 herds were quarantined in FY 1973 and 18 herds in FY 1974. The source of infection for 12 of the 17 herds (70 percent) was traced to the addition of untested replacement cows that were offered for sale in Montana.

The increase in Brucellosis noted to date in FY 1975 emphasizes the need for the Department of Livestock to encourage (1) the vaccination of all possible replacement heifers with Strain 19 brucella vaccine, and (2) herd owners to require that all herd additions be tested for brucellosis prior to introducing them into their herds.

These key points are being re-emphasized in the national brucellosis program where a resurgence of the disease is reported. The number of infected herds in the U.S. jumped from 11,578 in fiscal year 1972 to 14,249 in fiscal year 1974 - a 19 percent increase.

Much of this increase is due to the movement of infected and exposed cattle into herds without test, and this is the greatest problem in Montana. Other reasons

for the national increase is the basic fact that Southern states are finally achieving more complete herd and area tests and so more reactors are resulting. But a real dilemma of national significance now exists in that the vaccinated population appears to be less than needed to effectuate a prompt eradication of bovine brucellosis. Too many states have delayed their testing program long enough to lose the benefits of the vaccination program of a decade ago.

The following article was taken from the "Morbidity and Mortality Weekly Report ", Center for Disease Control, Atlanta, Georgia:

"ANIMAL ANTHRAX ASSOCIATED WITH PACK SADDLE PADS - WASHINGTON

On Spetember 2 and 3, 38 animals at a private game farm near Sequim, Washington, died of probable anthrax. By September 9, a total of 42 deaths had occurred among 125 carnivores at the farm. Most of the deaths were in cougars and other large felines. At necropsy,2 cougars had pharyngeal and cervical edema, splenomegaly, and multiple hemorrhages in lymph nodes and other organs. Bacillus anthracis was isolated from tissues of 2 cougars and 1 jaguar.

On August 31, the large cats had been fed meat from a horse which had died suddenly the previous day. B. anthracis was subsequently isolated from a portion of the horse meat which remained at the game farm. Five days prior to death, the affected horse had returned from a pack trip to the Olympic Mountains. During the trip the horse had been severely bitten by flies, resulting in visible cutaneous bleeding. Several other horses which were less severely bitten did not become ill.

New pack saddle pads made of goat hair had been used for the first time during the trip. Samples obtained from 1 of these pads and from 8 other unused pads remaining at retail outlets were culture-postive for B. anthracis.

The saddle pads had been obtained from a California distributor who had purchased them from the Perforated Pad Company in Rhode Island. Interviews regarding the origin of the raw materials and manufacturing process revealed the following information. The saddle pads contained (a) coarse goat hair, (b) cashmere (fine goat hair), (c) fibrene blend. and (d) a quilted cotton duck or canvas cover on 1 side of the pad. The coarse goat hair was reportedly imported from Pakistan by a broker in New Jersey and is usually shipped directly to a plant in Massachusetts. There, the hair, fibrene material, and cashmere are incorporated into a hair felt pad. The cashmere, imported from Afghanistan, is obtained from a second Rhode Island firm. The hair felt manufactured by the Massachusetts firm is sold exclusively to the Perforated Pad Company, which completes the production of the pack saddle pads. Samples of the coarse goat hair, fibrene, cashmere, and hair felt pad from the Massachusetts firm, and hair felt pad from the Perforated Pad Company have been cultured. Hair felt pads from the Perforated Pad Company and the Massachusetts firm and cashmere obtained at the plant in Massachusetts were culture-positive for B. anthracis. Repeat cultures of coarse goat hair from the Massachusetts firm and cultures of cashmere scraps collected at the second Rhode Island plant are being performed. Production of the saddle pads has been curtailed pending the results of the investigation."

Investigation by this Department showed 498 Alaskan Hair Saddle Pads (Model # 832, 832R and 238R) had been shipped into Montana in the spring and summer of this year. Of the 498 saddle pads only 95 remain untraceable. One saddle pad, of the numerous pads cultured at the Diagnostic Laboratory at Bozeman, was positive for Anthrax, but no horses or other animals in Montana have been diagnosed as Anthrax victims from exposure by these pads.

The investigation is continuing and any information you have regarding saddle pads of the above style numbers should be referred to this Department.

CURRENT INFORMATION ON TOXOPLASMOSIS

The following material is taken from the Wisconsin Department of Agriculture, Animal Health Division "Animal Health" October 1974 Newsletter.

"Wisconsin Animal Health Laboratories

Toxoplasmosis notes from the 16th annual midwest interprofessional seminar on diseases common to animals and man:

Ninety-eight percent of toxoplasmosis cases in humans and in cats is subclinical. Transmission is primarily by ingestion of infested meat and/or oocysts and very rarely occurs transplacentally.

Diagnosis in humans is best accomplished by serodiagnosis as the antibody development is prompt and high titers are reached. In cats, however, antibody development is slow and only relatively low titers develop, so that the antibody titers during disease differ little from those after recovery. Actually, most kittens die prior to development of any significant titers and most adult cats do not develop the disease. Cats that do show a titer are immune and the shedding of oocysts has ceased.

Fecal examination in cats is the most important method of diagnosis. The oocysts resemble those of coccidia except they are only 1/3 to 1/2 (10-13 microns) the size of coccidia oocysts. The common hypertonic sucrose or zinc sulfate flotation media combined with centrifugation can be used.

A fluorescent antibody test for toxoplasmosis is available.

Sulfadiazine is the drug of choice for treatment. The recommended dose is 100 mg/kg divided into four daily dozes. Pyrimethamine (Daraprim) is sometimes used to enhance the effectiveness of the sulfadiazine. Prolonged treatment should be avoided as it will affect platelet maturation.

Sulfadiazine-Daraprim treatment markedly diminishes but not completely abolishes oocyst shedding by cats."

NEW DEPUTY STATE VETERINARIAN

Perry Ryneer, D.V.M.

Townsend, MT.



AUTOPSIES PERFORMED REPORT

SPECIES	NUM	BEF
Bat		14
Cat		1
Cattle		6
Chicken		7
Chipmunk		1
Dog		2
Fetus:		
Bovine		1
Equine		2
Horse		3
Mouse		1
Muskrat		2
Raccoon		
Rat		
Sheep		3
Skunk Swine		. 3
Swine		10
Weasel		1
TOTAL AUTOPSIES PERFORMED		58

SUMMARY OF THE LABORATORY REPORT FOR SEPTEMBER, 1974

The diagnostic Laboratory processed 279 accessions during the month of September, 1974. A breakdown by species, showing number of accessions, number diagnosed, and percentage diagnosed, is as follows:

Species	No. of Accessions	No. of Diagnosis	% Diagnosed
Bovine	113	61	54%
Equine	38	22	58%
Porcine	19	12	63%
Ovine	2	2	100%
Feline	10	8	80%
Canine	36	34	94%
Avian	14	9	64%
Wildlife	30	30	100%
Other	17	12	70%

The 100% diagnosis on Wildlife species all involved rabies suspects.

As was the case in August, 25 Bovine accessions were reported out as undetermined due to a lack of paired serum samples.

As a "rule of thumb," the laboratory is trying to be fair and consistent in reporting our "Undetermined," "Not Diagnosed," and "Incomplete." In those cases involving serology and paired serum samples are desired, we report our findings as "Incomplete" if paired sera are not submitted. For clarification: we suggest an acute blood sample be drawn, the clot removed, and the sera held under refrigeration until a second blood sample is drawn three weeks later. Then both sera should be submitted to the laboratory at the same time. In this way, both sera are run against the same system, same cells, same controls, etc.

In cases where <u>not all</u> diagnostic tissue, blood, or specimens were received at the lab (i.e. fetus, no maternal blood) and we feel we did not have a fair chance to make a diagnosis, we feel justified in reporting out our findings as "Undetermined," with the feeling being that we did not have all available and desired tools to make a diagnosis. The term "Not Diagnosed" applies when we feel we have had every chance to arrive at a diagnosis and we were unable to arrive at one.

We find nothing outstanding in the Bovine category in September. In cooperation with Dr. Holcomb, we have been attempting the isolation of Brucella organisms from suspect Brucellosis herds. We have been successful in a number of cases. The cultures are referred to NADL for typing with most cultures being Biotype 1.

Due to the delay in obtaining results from NADL, we have, in the past several months, sent our Equine serum to Rocky Mountain Laboratory in Hamilton

for WEE and EEE serology. We very much appreciate their cooperation and results are being reported in 7-10 days. We have reported out several positive WEE sera.

 $\ensuremath{\text{One-fourth}}$ of the Canine accessions for the month consisted of neoplasm submissions.

On two occasions in September, we diagnosed histomoniasis in Avian specimens with one of these diagnosis being in a wild turkey.

The bulk of the rabies specimens for the month consisted of bats. We looked at twelve bats and this was followed by eight skunks.

Again, Gallatin County led all counties with specimen submissions. Second was Yellowstone County followed by Missoula County.

As you no doubt know, the State-Federal Serology Laboratory, headed by Mr. Ike Sheehan, is literally swamped with blood samples. The new Canadian requirements on feeder steers and the large number of sales, accounts for much of the increased workload. That section of the laboratory is doing its best to keep current with incoming blood, but at times it seems impossible. We have a new serologist in that section, Mrs. Alice Boughton, who is on full-time duty assisting Ike. Mrs. Boughton has a B.S. in Microbiology from Montana State University. She has had considerable experience in several hospitals in the state. This is the first time we have been able to have full-time, experienced help to back up Mr. Sheehan.

One more suggestion--if you will submit specimens for histopathology in formalin, we can gain 24 hours in getting the specimen processed. In addition, the specimen is almost always of superior quality with less autolysis.

SEROLOGY REPORT

TEST			SPECIES	POSITIVE	NEGATIVE	SUSPICIOUS	TOTAL
Anaplasma	CF		. Cattle		, 734	63	797
Anaplasmos	is		Deer		2		2
Bluetongue			. Cattle		740	43	783
"			Deer		2	1	2
Brucella a	bortus agglutin	ation	. Cattle		13,277	. 35 .	13,312
11	11 11	(Card - Field & Market)	. "		4,346		4,346
11	11 11		Deer		2	. 1	2
11	11 11		. Goat		5		5
11	11 11		. Horse		2		2
11	11 11		. Swine		10	1	10
11	11 11	(Card - Diag. Lab.)	. "		29		29
11	11 11	(Card - Field & Market)	. "		. 7		7
Brucellosi	s Ring Test		. Cream		204	1	205
11		a			2		2
Leptospira	borincana aggl	utination	. "		3		3
11	canicola	11	. "		3		3
17	grippo-typhosa		. "		3		3
11	hardjo	11	. "		6	1	7
11	hebdomadis	11	. "		2		2
11	icterohemorrha	gia agglutination	. "		3		3
rr		ation			3	1	3
11	pomona "		. "		32	3	35
Western Eq	uine Encephalit	is	Horse	11	282		293
TOTAL SERO	LOGY TESTS			. 11	19,699	146	19,856

^{*}Test results reported from various out-of-state laboratories

MONTANA VETERINARIANS' ANIMAL DISEASE REPORT

SEPTEMBER-1974

80 Veterinarians	Reporting	31 Counties	Reporting	30 Disea	ises Reporte:

	INDEX OF COUNTIES														
CATTLE:	1	2	3	4	5	6	7	8		12	13	14	16	18	20
Actinobacillosis	2	5	40	T				3					7		-
Anaplasmosis									15		1		T		
Arthritis			5												
Bacillary hemoglobinuria											3				
Blackleg			1	T		T	4								
Brisket edema												T			
Brucellosis			16										1		
Cancer eye	6	6	49				7	3			J	Ι.	9	2	
Coccidiosis			6		2			Γ			3	T	1		
Grass tetany												T			
Helminthiasis			1	1							3				
Infectious keratitis							108								
Mastitis			2										T		
Metritis			2												
Nutritional			2			П		T							
Pulmonary emphysema		3	5	1			2		7			8		6	
Rhinotracheitis			1					4							
Shipping fever		22	12					1			60			2	
Urolithiasis				1		Т		1		1				2	
Virus diarrhea			1								1				
Virus warts		1	4												
SWINE:		1		1		\Box							1		
Erysipelas			1		8	1	1	1	10		1			1	1
Scabies															Г
HORSES:		1		1		1									\Box
Distemper	1	23	7		2				2	1		1	1	1	1 5
Encephalomyelitis		1				1				2			1		
Influenza		2	3	1	4		21				1		1	5	12
Tetanus		1			1	T-		1					1		
DOGS:		1		1											
Distemper		30	9	8	8	1	1	1		2	-	1		1	1 8
Infectious hepatitis		1						T			1				
Leptospirosis		T				1				1					
POULTRY:			1					1					T		
Cholera															1
	-														

80 Veterinarians Reporting 31 Counti	ies Reporting 30 Diseases Reported

					IND	X O	F CO	UNTI	ES				
CATTLE:	21	22	24	25	27	28	29	31	35	36	38	45	46
Actinobacillosis	1		1		I							-	
Anaplasmosis								-			+		
Arthritis								-			-		
Bacillary hemoglobinuria		T		1						-	-	-	1
Blackleg		1				1		-		-	-	-	
Brisket edema		T						-			-		
Brucellosis								-		-	-	-	
Cancer eye	4				8					-	-	+	
Coccidiosis								-	-	-	-		
Grass tetany		I						1		-	-	-	-
Helminthiasis		L						1	-		4	-	
Infectious keratitis							L	-	<u> </u>	-	+	-	
Mastitis		1		_		1	-	-	-		-	-	-
Metritis			1	1	1	_		-	-	+	+	+	
Nutritional			_		_	-	-	<u> </u>	-			+	-
Pulmonary emphysema		4	1	1	-		-	-	5	+	2	+	
Rhinotracheitis					1		-		-	+			
Shipping fever				_	_	-	-		-	+-			
Urolithiasis			_		1_	1	-		-	11		-	
Virus diarrhea					1	-	-	-	-	+		+	-
Virus warts						1-	-	-	+			+	-
SWINE:		- 1				1	1	1					
Eyrsipelas			_	1		-		-	+-			100	
Scabies						1-	-	-				20	-
HORSES:			1								1		
Distemper		-	-	-	-	12	1	-	-	-	4	-	+-
Encephalomyelitis		4	-	2	+	-		+-	+			-	+
Influenza	-		+-		-	-	+	+-	-	-		+	+
Tetanus	-	-	-	-	+-	-	+	+	+-			+-	+-
DOGS:						1.					9		
Distemper		6	-		1 2	6	-	-	+		1 9	+	-
Infectious hepatitis	-				1-	-	-	-	+-	-		+-	-
Leptospirosis	-	-	-	-	3	+-	-	-	-	-+-	-	+-	-
POULTRY:													
Cholera						_		-			-		

	INDEX (F COU	NTIES		TOTAL	TOTAL
CATTLE:	47	49	56	1	CASES	HERDS
Actinobacillosis					60	38
Anaplasmosis					15	1
Arthritis					. 5	2
Bacillary hemoglobinuria					5	5
Blackleg		T			7	4
Brisket edema		2			2	2
Brucellosis					16	10
Cancer eye					94	60
Coccidiosis		1			12	6
Grass tetany	4				4	1
Helminthiasis					9	5
Infectious keratitis					108	72
Mastitis					2	1
Metritis					2	1
Nutritional					2	1
Pulmonary emphysema	2				45	18
Rhinotracheitis					5	2
Shipping fever		1	1		98	9
Urolithiasis		1			5	5
Virus diarrhea		2			4	4
Virus warts					4	2
SWINE:				-		
Erysipelas	1		2	1	20	4
Scabies		 		-	20	1
HORSES:		1				
Distemper	1	-	1		57	36
Encephalomyelitis		1		-	9	6
Influenza	-	1			47	12
Tetanus		-		-	1	1
DOGS:		+		-	_	
Distemper		1	2		93	88
Infectious hepatitis	-	 	-	-	1	1
Leptospirosis		+		-	4	4
POULTRY:	-	 		-	1	-
Cholera		1	95		95	1
GHOTCIA	1	+	122	-1	1 33	
TOTAL CASES AND HERDS					851	403

MONTANA VETERINARIAN'S ANIMAL DISEASE REPORT

INDEX OF COUNTIES

NO.	COUNTY	NO.	COUNTY	NO.	COUNTY
1	Silverbow	20	Valley	39	Fallon
2	Cascade	21	Toole	40	Sweet Grass
3	Yellowstone	22	Big Horn	41	McCone
4	Missoula	23	Musselshell	42	Carter
5	Lewis & Clark	24	Blaine	43	Broadwater
6	Gallatin	25	Madison	44	Wheatland
7	Flathead	26	Pondera	45	Prairie
8	Fergus	27	Richland	46	Granite
9	Powder River	28	Powel1	47	Meagher
10	Carbon	29	Rosebud	48	Liberty
11	Phillips Phillips	30	Deer Lodge	49	Park
12	Hi11	31	Teton	50	Garfield
13	Ravalli	32	Stillwater	51	Jefferson
14	Custer	33	Treasure	52	Wibaux
15	Lake	34	Sheridan	53	Golden Valley
16	Dawson	35	Sanders	54	Mineral
17	Roosevelt	36	Judith Basin	55	Petroleum
18	Beaverhead	37	Daniels	56	Lincoln
19	Chouteau	38	Glacier		

REPORT OF THE COMMITTEE ON LEPTOSPIROSIS

U.S. Animal Health Association Leptospirosis Committee Report-1974

This report is included in this month's letter as a separate attachment for reference purposes. You are encouraged to review the report carefully as it contains many practical recommendations as to the surveillance, diagnosis and control of leptospiral infections of domestic animals.

As announced in the July, 1974 news letter, the Diagnostic Laboratory is using the microscopic agglutination (MA) test. Therefore, any animal serum having a titer of 1:100 or greater to any of the eight serotypes included in the antigen battery will be considered positive. However, you are encouraged to submit serum specimens from at least 10 animals or greater (preferably 10 percent of the herd) as an absolute minimum to establish the diagnosis of leptospirosis in the herd.

REPORT OF THE COMMITTEE ON LEPTOSPIROSIS

78TH ANNUAL MEETING U.S. ANIMAL HEALTH ASSOCIATION, OCTOBER 18, 1974 Roanoke, Virginia

The Committee reviewed developments in leptospirosis as presented in reports on diagnostic control and research activities of the previous year. The meeting agenda included: (1) the results of serologic testing of various species for various serotypes; (2) the significance of serologic titers; (3) reports of recent outbreaks from newly recognized serotypes; (4) the status of new bacterins; (5) control of leptospiral outbreaks in cattle, and (6) revision of the 1957 USDA special report on leptospirosis.

The summary of a leptospiral serologic survey was obtained from data from 20 diagnostic laboratories located in 18 states. The results were obtained with the microscopic agglutination (MA) test in 10 laboratories and with the macroscopic agglutination (Plate) test in 10 laboratories. Table 1 summarizes the compiled information on cattle, swine, horse and dog sera. The data on cattle and swine involved reports from all laboratories, the equine test reports were from 8 laboratories, and the dog test reports from 10 laboratories. An analysis of the summary of the test results indicates the predominant serotypes in cattle were pomona, hardjo, and grippotyphosa, in swine pomona, grippotyphosa, and iterohaemorrhagiae, in horses all the five serotypes except hardjo, and in dogs canicola, icterohagemorrhagiae, and grippotyphosa. Some regional variations were apparent as hardjo reactions were not reported from the two laboratories from the northeastern region.

The Committee discussed various problems related to serodiagnosis of leptospirosis. Inadequate sampling has been a problem in confirming the clinical diagnosis of leptospirosis in cattle and swine herds. Frequently field sampling has been limited to serum samples from only one or two animals that have aborted or shown other clinical signs associated with leptospirosis. THE COMMITTEE RECOMMENDE THAT WHEN LEPTOSPIROSIS IS SUSPECTED AS A HERD PROBLEM THE PRACTICING VETERINARIAN SHOULD SUBMIT SERUMS FROM AT LEAST 10 ANIMALS OR GREATER, FROM 10 FERCENT OF THE HERD. THE SAMPLING SHOULD INCLUDE SERUM FROM BOTH AFFECTED AND NORMAL ANIMALS SO THAT THE EXTERT AND DURATION OF THE EPIZOOTIC CAN BE ESTIMATED. Samples should be accompanied by clinical histories from each animal tested.

Diagnostic laboratories are encouraged to use serotypes pomona, hardjo, canicola, icterohaemorrhagiae, and grippotyphosa in their test systems. Those having the technical competence to safely cultivate leptospires and use living antigens are encouraged to use the microscopic agglutination test and the microtiter system which enables the more efficient application of the test. The long retrospect of the microscopic agglutination test should be considered in relating serologic findings to clinical diseases.

The proper interpretation of the significance of antibody titers was emphasized. ANTIBODY TITERS OF AT LEAST 1:40 ON THE PLATE TEST (STOEMMER ANTIGIN) OR 1:100 ON THE MICROSCOPIC AGGLUTINATION TEST INDICATE PAST EXPOSURE TO LEPPOSPIES AND THE HEIGHT OF ANTIBODY TITER BEARS LITTLE OR NO RELATIONSHIP TO THE SHEDDER STATE. SOME INFECTED ANTHALS FALL TO DEVELOP ANTIBODIES, AND SOME SHED ORGANISMS LONGER THAN THEY REMAIN SEROPOSITIVE. Hence, certification of individual animals as free of leptospirosis for interstate or international shipment without knowledge of the serologic status of the rest of the herd cannot be recognized as a sound control

An outbreak of leptospirosis due to serotype mini-szwajizak in an Oregon dairy herd was reported to the committee. This is the first cultural evidence of the existence of this serotype in the United States. mini-szwajizak is the major serotype causing leptospirosis in man and dairy cattle in Israel. The major signs noted in this herd were infertility, stillborn or weak calves that died within two weeks and mastitis. Abortions were also noted, but they were not considered to be the major problem. The clinical problems and mortality rate were reduced subsequent to vaccination of the entire herd with hardjo and mini-szwajizak bacterins. Therefore, the efficacy of the individual bacterins could not be determined. The same clinical problems are also occurring in two additional epidemiologically related herds. However, laboratory studies have not been attempted.

Status of new bacterins was discussed. In September, 1974, a one year license was granted to one pharmaceutical company to manufacture for sale a triple bacterin containing the pomona, grippotyphosa, and hardjo serotypes. A special report entitled "Host Animal Efficacy Studies Using a Multivalent Leptospira Bacterin" was presented by H. L. Strother and is published elsewhere in this proceeding. Since August, 1973, single bacterin hardjo utilized for prevention and control. These two single bacterins will now be replaced by the triple bacterin product. The product is only available from one veterinary biologic company.

Bacterins containing the icterohaemorrhagiae and canicola serotypes are licensed by several companies for use in cattle and swine. The pomona bacterin is available as a single antigen from several companies.

Utilization of bacterins is dependent upon identification of sero group in the geographical area of herds under consideration. A report on the use of combined chemotherapy and vaccination for the control of outbreaks of leptospiral abortion in beef cattle was received by the committee. BROOD COWS IN FIVE HERDS IN IDAHO WERE VACCINATED WITH LEPTOSPIRAL VACCINE AND SIMULTANEOUSLY TREATED WITH 25 mg. DHYDROSTREPTOMYCIN PER KILO BODY WEIGHT. IN EVERY HERD, ABORTIONS CEASED TO OCCUR SHORTLY AFTER TREATMENT. The authors emphasized that this treatment regime is best applied to herds in which the disease is diagnosed during the early phase of an epizootic.

Although the Committee recognized many of the previous goals in leptospirosis research have been accomplished, the following areas are in need of further research:

(1) as serologic data indicate leptospirosis is an important disease of horses, more intensive investigation of the effects of the disease on reproduction in horses and determination of the efficacy of bacterins in the control of equine leptospirosis; (2) further evaluation of the efficacy of leptospiral bacterins utilizing available testing procedures; (3) further determination of the distribution of the serotypes tarrasovi autumnalis and szwajizak in the United States and the pathogenesis in cattle, swine, and horses and (4) long term evaluation of dihydrostreptomycin therapy in cattle and swine.

The Committee commends the US Department of Agriculture for the decision to revise the informational release on leptospirosis. The Committee has accepted the responsibility for assistance in the preparation of the new paper.

TABLE I

ALL SPECIES MICROSCOPIC AND MACROSCOPIC* AGGULUTINATION TITERS FOR LEPTOSPIROSIS 1974

SPECIES	NO. SERA TESTED	HARDJO	POMONA	GRIPPO- TYPHOSA	CANICOLA	ICTERO- HAEMORRHAGIAE	TOTAL
Cattle	66,522	7.2	6.5	1.4	0.7	0.8	16.4
Swine	13,458	0.4	5.6	0.9	0.2	0.8	7.9
Horses	2,121	0.4	4.9	2.2	2.8	4.3	14.6
Dog	296	-0-	0.7	1.7	7.7	4.4	14.5

Most were conducted in 1973, but some diagnostic laboratories reported July to June tests for the 1973-1974 year.

EXCERPTS AND SUMMARIES OF CHANGE IN PROGRAMS OF REGULATIONS AFFECTING MOVEMENT OF LIVESTOCK

"Special Notice To Veterinarians From Diagnostic Laboratory."

Mr. Ike Sheehan has four problem areas in his work that could be corrected in the field and would help immensely to lighten his workload. Perhaps you can help.

- (1) For all export shipments, he <u>must</u> have a <u>full</u> tube of blood or 3 cc's of clear serum.
- (2) Please use the proper forms when submitting blood for particular tests. Forms are available for Brucellosis, Anaplasmosis, and Leptospirosis. Blood for Bluetongue testing should be submitted on an Anaplasmosis form. Mark out "Anaplasmosis" and substitute the words "Bluetongue." If both tests are required, just add the words "Bluetongue."
- (3) The plastic blood tubes are treated with a solution to help remove clots and prevent hemolysis. <u>Do not</u> re-use the plastic tubes unless they have been washed and treated <u>at</u> the <u>laboratory</u>.
- (4) Please do not submit blood to the laboratory in a hypodermic syringe. It is almost impossible to get the blood out of the syringe without getting cell destruction and hemolysis.

Ike would certainly appreciate your cooperation.

ARIZONA - Negative Coggins Test 10-23-74

All horses, ponies, mules and asses entering Arizona must be accompanied by an official health certificate showing negative results to agar-gel immuns-diffusion test for EIA within 6 months prior to entry. Enforcement will begin January 1, 1975.

MAINE - Permits required on animals, avians and reptiles

Any person or persons bringing horses, cattle, mules, asses, sheep, goats, swine, wild animals, avian species or fertile eggs of such species, amphibians or reptiles into the State may be required by the commissioner to obtain a permit previous to the time of entry, said permit to accompany shipment.

MASSACHUSETTS - Negative Coggins Test 10-15-74

Effective October 20, 1974, each equine animal entering Massachusetts must

Massachusetts (Continued)

have a negative Coggins test (no stipulation given as to time element) certified to by the attachment of the original test chart with full and complete identification thereon shown.

MINNESOTA - Negative Coggins Test 10-1-74

- Effective September 23, 1974, horses imported into Minnesota on a permanent basis will need a health certificate issued within 30 days prior to importation certifying to a negative test for EIA within 6 months prior to importation.
- H.C. and tests not required for horses in rodeos, circuses, trail rides, horse shows or for slaughter.
- Sale horses need H.C. If sold to remain in Minnesota, they must be tested before released from sale, if not previously tested for compliance.

NEBRASKA - Change of Import Requirement for Cattle 10-30-74

Brucellosis - Cattle:

All female cattle and bulls entering the State of Nebraska over six (6) months of age must be tested for Brucellosts and found negative within thirty (30) days before entry and results recorded on official health certificates.

Exceptions:

- Official brucellosis vaccinated heifers of beef breeds up to twenty-four (24) months of age and dairy breeds up to twenty (20) months of age may enter without test and with proof of vaccination.
- Cattle that originate in an accredited herd and the herd number appears on accompanying health certificate.
- Spayed heifers and steers are exempted.
- 4. Cattle going directly to federally inspected slaughtering plant.
- Female cattle of the beef breeds under eighteen (18) months of age may enter with permit and health certificate to be held in isolation from other cattle for feedlot purposes and be identified by brand, tattoo, or metal ear tag.
- Cattle may move directly from farm or ranch in certified or modified certified areas to an approved market for test prior to sale or sold for slaughter only.

E S ABY, D.V.M.
BOX 971
GLENDIVE, MT. 69330
365-3475

ORLEY ARTHUR, D.V.M.
BOX 67
ROUNDUP, MT. 59072
323-2287

ROBERT R BELL, D.V.M. BOX 190 CULBERTSON, MT. 59218 787-6682

F J ALDERINK, D.V.M.

HOT SPRINGS, MT. 59845 741-2576 JOE K BABER, D.V.M. CUSTER VET CLINIC BOX 121 MILES CITY, MT. 59301 232-4674 JOHN A. BEUG, D.V.M. RT. 1, BOX 1 RED LODGE, MT. 59068 446-2815

JOHN R. ALEXANDER, D.V.M. BOX 426, M9LEOD ROUTE BIG TIMBER, MT. 59011 932-3345 C. BEN BAKER, D.V.M. BOX 24 SHEPHERD, MT. 59079 259-6529 DAVID N BISBEE, D.V.M. SIMMS, MT. 59477

965-3232

C K ANDERSON, D.V.M.
VET RESEARCH LAB
M S U
BOZEMAN, MT. 59715
994-4705

ARLA N. BARKEMEYER, D.V.M. STAR RT. GALLATIN GATEWAY, MT. 59730 388-4272 PAUL H BISSONETTE, D.V.M. BOX 287 DEER LODGE, MT. 59722 846-1925

JUDITH M. ANDERSON, D.V.M. 1355 BITTERROOT ROAD HELENA, MT. 59601 442+6450 BASE VETERINARIAN
MALMSTROM A.F.B.
GREAT FALLS, MT. 59402
731-3065

GARY L. BLAKEMORE, D.V.M. P 0 30X 827 LEWISTOWN, MT. 59457 538-5660

MELVYN ANZICK, D.V.M. 1104 E PARK LIVINGSTON, MT. 59047 222-3011 ROGER BAXTER, D.V.M. BOX 712 CHINOOK, MT. 59523 357-2544 VLADIMAR BLAWATSKY, D.V.M. 625 9TH AVE HAVRE, MT. 59501 265-7736 E WAYNE BOLAND, D.V.M. 50 MOORE LANE BILLINGS, MT. 59102 252-4159 DONALD L. BUELKE, D.V.M.
VICTOR VET CLINIC
RT 1, BOX 117-C
VICTOR, MT. 59875
642-3471

GARY C. CASSEL, D.V.M. BOX 177 CUT BANK, MT. 59427 938-4111

DAVID F BRISTOL, D.V.M.
GLACIER VETERINARY CLINIC
COLUMBIA FALLS, MT. 59912
892-4319

ROBERT C. BURGMAIER, D.V.M. RT 1 POWER, MT. 59468 467-2946 J E CATLIN, D.V.M. M S U BOZEMAN, MT. 59715 994-4705

J N BROGGER, D.V.M. 920 S W HIGGINS MISSOULA, MT. 59801 543-7723 G. WARD BURLEIGH, D.V.M.
HEATH ROUTE
LEWISTOWN, MT. 59457
538*9712

JAMES C. CLEMENT, D.V.M. STAR RT. VAUGIIN, MT. 59487 965-3232

R J BROPHY, D.V.M. RT 2 BOX 2073 HAMILTON, MT. 59840 363-1123 K R BURRITT, D.V.M. 3240 HARRISON AVE BUTTE, MT. 59701 494-3630 E R CLINE, D.V.M. BOX 821 LEWISTOWN, MT. 59457 538-3663

H. A. BROSZ, D.V.M.
RT I BOX 288-15
MILES CITY MT 59301
232-0569

M R CAMPBELL, D.V.M. 839 POLY DR BILLINGS, MT. 59102 252*3006

D G COLMEY, D.V.M. BOX 521 LIVINGSTON, MT. 59047 222-1700

K J BRUCHEZ, D.V.M. BOX 176 HOBSON, MT. 59452 423-5555 LARRY DEAN CASS, D.V.M. RT 1 BOX 202A LAUREL, MT. 59044 698-8977 E F COLTON, D.V.M. BOX 206 KALISPELL, MT. 59901 756-6695 M. R. CONNELL, D.V.M.
GLASTON VETERINARY CLINIC
GLASTON, MT. 59230
228-8279

JOHN J CURTIS, D.V.M. DRAWER O MALTA, MT. 59538 654+1794 BOYD EMOND, D.V.M.
VICTOR, MT. 59875

642-3450

GARY L. COOK, D.V.M. BOX 1111 BOZEMAN, MT. 59715 587-4275 E G DAVIS, D.V.M. 316 CENTRAL AVE W GREAT FALLS, MT. 59401 761-7055 ROGER D ERFLE, D.V.M. BOX 1703 BILLINGS, MT. 59102 245-4847

EARL COOPER, D.V.M. 1509 RIVER RD MISSOULA MT 59801 549-4009 HARRY DISNEY, D.V.M. RT. 1, BOX 1351 LIBBY, MT. 59923 293-7410 L A ERICKSON, D.V.M. 2500 HARRISON AVE BUTTE, MT. 59701 792-0550

DR. R.L. CORNELIUS, D.V.M. BOX 494 BAKER, MT. 59313 778-2325 M P DORAN, D.V.M. BOX 1665 GREAT FALLS, MT. 59401 453-1629 H. H. FANELLI, D.V.M. 414 W MONTANA LEWISTOWN, MT. 59457 538-3258

R. L. COWEN, D.V.M. 112 SOUTH 18TH ST BILLINGS, MT. 59101 245-6447 DUANE M DOUGLAS, D.V.M. BOX 703 SIDNEY, MT. 59270 482-1413 D. P. FERLICKA, D.V.M. DEPARTMENT OF LIVESTOCK HELENA, MT. 59601 449-3074

R J CROSSLEY, D.V.M. 1605 STEPHENS MISSOULA, MT. 59801 543-4641

I J DYEKMAN, D.V.M. BOX 397 GLENDIVE, MT. 59330 365-3475 J. M. FERRELL, D.V.M. RT. 3 BILLINGS, MT. 59101 373-5965 JOHN W FORSBERG, D.V.M. BOX 967 FORSYTH, MT. 59327 356-7564 CHARLES GERNER, D.V.M.
BOX 109
SWEETGRASS, MT. 59484
335-2142

MICHAEL J. HAALAND, D.V.M. P. O. BOX 126 WORDEN, MT. 59088 967-3600

J W FRAZER, D.V.M. BOX 771 POLSON, MT. 59860 883-4823 K A GERNER, D.V.M. RR 2 80X 112 STEVENSVILLE, MT. 59870 642-3257 W J HADLOW, D.V.M. 908 S 3RD HAMILTON, MT. 59840 363-2805

H E FURGESON, D.V.M. BOX 141 ANACONDA, MT. 59711 797-3707 JAMES W. GLOSSER, D.V.M. DEPARTMENT OF LIVESTOCK HELENA, MT. 59601 449-3074 HENRY C. HAIRSTON, D.V.M. 1 EAST BROADWAY BUTTE, MT. 59701 723-3331

S D GATES, D.V.M. BOX 821 LEWISTOWN, MT. 59457 538-3663 H C GOODELL, D.V.M. 803 3RD ST N W GREAT FALLS, MT. 59401 452-8402 TERRY LEE HALL, D.V.M. 213 -2 HIGHLAND PARK GLENDIVE, MT. 59330 365-3130

J W GEE, D.V.M. JUDITH BASIN VET SERVICE STANFORD, MT. 59479 566-2687 ERNEST E GOULD, D.V.M. BOX 146 ABSAROKEE, MT. 59001 328-3041 GLENN C. HALVER, D.V.M. DEPARTMENT OF LIVESTOCK HELENA, MT. 59601 449-3074

A L H GEFFERT, D.V.M. BOX 344 GLENDIVE, MT. 59330 365-5552 R W GUSTAFSON, D.V.M. BOX 1087 CONRAD, MT. 59425 278-3236 GARY D. HAMMILL, D.V.M. RT 2 KALISPELL, MT. 59901 752-3530 ALLEN L. HAN, D.V.M. BOX 62 CHESTER, MT. 59522 334-7878 A G HEATON, D.V.M. BOX 287 DEER LODGE, MT. 59722 846-1925 PAUL N. HOLCOMB, D.V.M. ROUTE 1 BOZEMAN, MT. 59715 388-6320

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DEC 1 0 1974

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Animal Health Division

Helena, Montana 59601



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MONTANA DEPARTMENT OF LIVESTOCK Animal Health Division Helena, Montana 59601

MONTHLY LETTER - DECEMBER, 1974

PROGRESS IN RECOVERING SADDLE PADS

Recovery of the Alaska Hair Saddle Pads distributed in Montana, described last month as potentially infected with anthrax spores, has been very satisfactory. It has now been determined that a total of 566 of these pads manufactured by the Perforated Pad Company in Rhode Island entered Montana in 1974 and at this time a total of 495 have been located and destroyed. The effort extended by veterinarians, retailers, and public health sanitarians in accomplishing this recovery makes it now appear that the remaining 71 pads must be considered untraceable.

The recovered pads have been incinerated almost entirely in laboratory incinerators or such facilities available at local centers. Appropriate measures have been pursued to recover the purchase costs in most cases. Some of those pads not recovered may have been appropriately disposed of by their purchasers. Although the impact of the public alert is past, the risk that may still be present in the missing pads is something of veterinary concern in Montana.

MONTANA VETERINARY MEDICAL ASSOCIATION WINTER MEETING December 13 & 14, 1974

The winter meeting of the Montana Veterinary Medical Association has been announced by President Paul N. Holcomb for Saturday and Sunday, December 13 and 14, 1974 at the Heritage Inn, Great Falls.

This winter meeting, held earlier than usual, holds significance for Montana Veterinarians. Not only will the Montana Veterinary Practice Act be a subject for pre-legislative discussion, but the Department of Livestock will be presenting information of veterinary legislative interest on the collection of fees for laboratory service and subsequent credit for laboratory expenditures. An increase in the permissive livestock mill levies for funding Department of Livestock programs in the future will also be reviewed.

This winter meeting, moved ahead from January to December, should be of professional and general interest to Montana veterinarians.

FIELD TRIALS TO BE CONDUCTED ON SCOUR VACCINES

The Disease Control Bureau will collaborate with Norden Laboratories in conducting experimental field trials of the Reo-Corona inactivated and modified live virus vaccines in selected Montana herds this next calving season. The inactivated vaccine is designed for use in pregnant cows, whereas modified live Reo-Corona is to be given to calves. Neither of these have been licensed for sale in the United States.

Six Montana herds have been selected for study using the inactivated vaccine. The trials will be a double blind study. Experimental labels will be identical

for vaccine and placebo and each label will be color coded for identification. Neither the veterinarian nor owner will know which is the vaccine or placebo. The product submitted for vaccination will consist of vaccine and placebo in a 1:1 ratio. Vaccine and placebo are to be administered as two 5 ml. doses intramuscularly 4 to 8 weeks apart during the second half of pregnancy.

The modified live virus trials are also double blind as outlined above, however, the vaccine and the placebo will be in a 3:1 ratio. Moreover, the liquid product will be administered orally to calves as soon after birth as possible. Herd selection for these trials will be based on a history of neonatal calf diarrhea and of which a positive diagnosis of the Reo and/or Corona has been demonstrated or is strongly suspected. (Scours occurring up to 12 days of age).

Record sheets will be provided to record ear tags, vaccine color, date of births and vaccinations. A most important part of the records is whether the calves develop diarrhea, at what age, treatment and response to treatment. Records are to be kept daily by the owner and reviewed frequently by the attending veterinarian. The herd owner is also requested to collect fecal samples from all calves that scour within 4-6 hours after the onset of scouring. Samples must be quick frozen, identified by calf number, held frozen and forwarded for testing (containers will be provided for specimen collection). It is vital to the success of these trials that a diagnosis be made on calves that die or develop diarrhea.

Norden Laboratories will provide vaccine, ear tags, etc., at no charge, and pay in full for all veterinary services for the trials.

It is the wish of the staff members of the Diagnostic Laboratory in Bozeman and the Animal Health Division in Helena that each of you as friends and associates have a VERY MERRY CHRISTMAS.

SUMMARY OF THE LABORATORY REPORT FOR DECEMBER, 1974

October has been a very busy but interesting month from the lab's standpoint. Total accessions processed were 348.

The accessions processed are as follows:

SPECIES	NUMBER
Bovine	171
Equine	42
Porcine	17
Ovine	2
Feline	21
Canine	33
Avian	13
Wildlife	23
Other	26

The story of the anthrax contaminated saddle pads and the anthrax out-break were related in last month's newsletter. It was interesting that both out-breaks occurred within the same week after going approximately eight years with no "anthrax activity" in the laboratory. Many people gotthe chance to see the "real things" for the first time. We were able to get some "textbook" color slides for our collection.

Also, last month we were able to make our first isolation of a leptospira organism. Mrs. Kay Newman was successful in isolating leptospira from the fresh kidney of a two-year old male bison from the National Bison Range at Moiese. The specific serotype has not been identified, but laboratory work on the isolate continues.

As most of you have probably found out, we are literally swamped with blood samples, primarily for animals to be shipped to Canada. It has created a back-log which means a delay in getting results for about two to three weeks. We have called several places trying to get help from laboratories in other states. Our only success has been at NADL at Ames, lowa. They are also swamped and running 10-14 days behind. During October the Serology Department(Mr. Sheehan and Mrs. Boughton) processed 29,952 blood samples. About 4,500 of these required both bluetongue and anaplasmosis, in addition to brucella testing. This averages out to about 1,400 tubes per working day. Obviously, they both put in considerable overtime to get the job done.

As a matter of clarification, the laboratory's policy on leptospirosis diagnosis on sera will be as follows: On an individual basis, a titer of 1:100 or greater will be called positive. If the sample is negative to leptospira, we will call it undetermined and note that paired samples were not submitted.

On a herd basis, we will want ten animals or 10% of the herd tested(which ever is greater). Then those showing titers of 1:100 or greater will be called positive on the single sample and an evaluation of the herd status will be made. Again, if samples are negative, we will suggest paired samples be submitted. In summary, single samples showing high titers will be called positive on individual animals. In order to call animals negative for leptospirosis, we feel two samples (three weeks apart) are necessary.

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AUTOPSIES PERFORMED REPORT

SPECIES NUMBE	R
Chicken	1 4 10 7 7
Fetus: Bovine. Equine Porcine.	4 3 2
Fox	1 4
Mouse	1 3
RatSkunkSquirrel	3
Switne	58

SEROLOGY REPORT

EST							SPECIES	POSITIVE	NEGATIVE	SUSPICIOUS	TOTAL
nanlasma	a CF						Bison		81	6	87
II II							Cattle		4,353	71	4,425
luetona	ue						Bison		75	7	82
II II							Cattle		4,252	82	4,334
11							Goat		3		3
rucella	abortus aggli	tinatio	n				Bison		87		87
II	II aggin	II					Cattle	1	20,223	63	20,287
11	II .	II	(Card -	Field	& Market)	II	3	3,073		3,076
11	II .	11	(Card -	Diag	lah)		H		137	2	139
11	II .	п	(Semina	l place	20.,				9		9
11	11	п	(Selli 111a	i piasii	ια /		Horse		2		2
11	11	п					Swine		10		10
		п					11		27		27
	11	п	(Card -	Diag.	Lab.)		"		97		97
			(Card -	Field)			Honco		209		209
Equine .	Infectious And	emia (Log	gins lest)				Cattle		91		91
eptospii	ra borincana	agg i utin	ation						51		-
	"						Horse		2	-	
	"						Swine		2		2
	."						Wildlife		91		91
	canicola	***					Cattle		91		91
11	11	"					Horse				
11	11						Swine		2		
11	II .	"					Wildlife		2		91
11	grippotyph	osa "					Cattle		91		
11	-11	- "					Horse		5		-
11	II .	"					Swine		2		- 4
II	II	11					Wildlife		2		
11	hardjo	11					Cattle	5	86		91
11	The state of the s	11					Horse		5		Ę.
11	II	- 11					Swine		2		2
11	11	11					Wildlife		2		2
11	hebdomadis	- 11					Cattle		91	2	93
H	II						Horse		5		5
11	II						Swine		2		2
							Wildlife		2	1	0

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SEROLOGY REPORT

TEST			SPECIES	POSITIVE	NEGATIVE	CUCDICIONS	TOTAL
Lontonnin	A debound on the				NEGALIVE	SUSPICIOUS	TOTAL
reprospire	<u>icterohemorrhagia</u>	agglutination	Cattle	2	85		87
			Horse	1	4		5
	"		Swine	1	1		2
"	11			1	1		
11	jules	11			91		
11		"			91		91
11	II .				5		5
11	II .				2		2
11	pomona	"			2		2
11	politoria	"		6	83		89
11	11				5		5
		"	Swine		2		2
"	"		Wildlife	1	1		2
TOTAL SERO	LOGICAL TESTS			23	33,414	233	33,670

^{*}Test results reported from various out-of-state laboratories.

MONTANA VETERINARIANS' ANIMAL DISEASE REPORT

OCTOBER, 1974

65 Veterinarians Reporting..... 37 Counties Reporting..... 30 Diseases Reported

					I	VDE X	OF (COUNT	TES				
CATTLE:	1	2	3	4	5	7	8	9	10	11	12	13	14
Abscess			2						-				
Actinobacillosis	5	23	69				14				1		
Anaplasmosis		T						2					
Anthrax													
Arthritis			5										
Bacillary hemoglobinuria						T						3	
Brisket edema			1				1						
Cancer eye	16	28	81	4		11	111				1		
Coccidiosis												5	1
Foot-rot			3										
Helminthiasis			\top									35	1
Infectious keratitis.			5			47							
Leptospirosis								3				1	
Malignant catarrhal fever									1				
Mastitis			8										
Metritis			1 2								1		
Pediculosis			1										
Pulmonary emphysema					6	12	3		3	4			
Rhinotracheitis		2			8	1		1					
Shipping fever			30		7		4	9				47	4
Urolithiasis		1	10		1		1			1			
Vibriosis									1				
Virus diarrhea								2			6	2	
SHEEP:			T										
Enterotoxemia		1										20	
SWINE:								T					
Atrophic rhinitis		1						1					
Erysipelas		2	1			3						4	
Scabies					T								
HORSES:			T				1						
Distemper		7	1		1			3			26		
Encephalomyelitis													
Influenza			2									3	
oogs:				T									
Distemper	4	16	16		5	5					3	3	
Infectious hepatitis.			T		1						4		
Leptospirosis		1					T						

65 Veterinarians Reporting.....

37 Counties Reporting....

30 Diseases Reported

				IND	EX C	'F CO	INTI	ES	No. of Concession, Name of Street, or other Persons, Name of Street, or ot	(Allegania)		
16	19	20	21	22	23	24	25	27	28	29	130	33
	-	-		-	1	-	-	-			1	
16			1		1	1		5	-	-	1	
	4		-		-	24			-	8	-	1
								6	-	-	-	
									-	-		
									-	-		
									_	-		
9					1			5		-		
		10			2			9	1	-	30	
										-	-	
										-		
					1					-		
						-	10	6		-		
							-		1			
									-	-		
									-			
						37	-	8		34		14
										-		9
	4.	6		60	20						35	
								2	7	17	-	14
		30						-				
			1						-		1	
							-					
			-								-	
			-									
					-							
					-	-						
										8		1
				-								-
		4						4			-	
		6						2	6	2	11	
									-		111	
	-								-			
	16	9	16 4 9 10 10 10 10 10 10 10 10 10 10 10 10 10	16 4 1 1 9 10 10 10 10 10 10 10 10 10 10 10 10 10	16 19 20 21 22 16 4 1	16 19 20 21 22 23 16 4 1 2 2 23 16 4 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	16 19 20 21 22 23 24 16 4 1 24 9 10 2 3 37 4 6 6 60 20 30 1	16 19 20 21 22 23 24 25 16 4 1 2 24 9 10 2 2 1 2 2 3 3 4 2 5 10 4 6 60 20 30 1	16 4 1 24 6 6 9 10 10 6 10 10 6 10 10 6 10 10 10 6 10 10 10 10 10 10 10 10 10 10 10 10 10	16 19 20 21 22 23 24 25 27 28 16 4 1 24 6 6 9 10 2 2 9 9 10 2 7 9 10 6 7 9 10 6 7 9 10 6 7 9 10 7 7 8	16 19 20 21 22 23 24 25 27 28 29 16 4	16

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65 Veterinarians R	eporting	37 Counties	Reporting	30 Diseases Reported
	the same of the sa	magnification that the first has not desirable the stands	THE RESERVE OF THE PARTY OF THE	The second secon

	INDEX OF COUNTIES								-		
CATTLE:	36	37	38	40	45	46	47	48	49	51	56
Abscess	- 30		- 30	+0	77	0	7/	70	43		20
Actinobacillosis							1				
Anaplasmosis					-	-	-	-			-
Anthrax			-		-	-					
Arthritis			-			-		-	-		
Bacillary hemoglobinuria	-				_	2		-			-
Brisket edema								-	-		-
Cancer eye						-			-		-
Coccidiosis	30	1							1		
Foot-rot		-	_		-	_			-		
Helminthiasis		-		_	-	-		 	-		-
Infectious keratitis			-								-
Leptospirosis					-				-		
Malignant catarrhal fever	-	-				-			-		
Mastitis					-			-			
Metritis		-	-	-		-	-	-		-	
Pediculosis	-		-		-			-			
Pulmonary emphysema		-	-			4	-				
Rhinotracheitis						+-4-			15	-	
Shipping fever		14	-	50		25	-		13		3
Urolithiasis		3	-	1	-	2		├	2		1 3
Vibriosis		1	40		-	 	9				
Virus diarrhea		1	+0		-	-	- 9		-	-	-
SHEEP:		-	-	-	-	-					
Enterotoxemia					1	1					
SWINE:				├─	├─	├		-	-	-	
Atrophic rhinitis		1				1		1			
Erysipelas	-	1	-			-	-	4	-		-
Scabies		-	-		30	+		+ +			-
HORSES:	-	-		-	30	-			+		
		l			1						1
Distemper	-		 						-		
Encephalomyelitis Influenza		-	-	-	-	-		-	-	-	
	-	-		-			-		-		
DOGS:		1	3		1	}				5	1 2
Distemper		1	3	-	-			-	-	1 5	2
Infectious hepatitis		-	 	+	+	-			-	+	+
Leptospirosis					1						

	TOTAL	TOTAL
CATTLE:	CASES	HERDS
Abscess	2	THE REAL PROPERTY AND PERSONS ASSESSED.
Actinobacillosis	135	74
Anaplasmosis	39	9
Anthrax	6	4
Arthritis	5	2
Bacillary hemoglobinuria	5	4
Brisket edema	1	1
Cancer eye	166	102
Coccidiosis	89	16
Foot-rot	3	2
Helminthiasis	36	6
Infectious keratitis	52	32
Leptospirosis	20	4
Malignant catarrhal fever	1	1
Mastitis	8	4
Metritis	2	1
Pediculosis	1	1
Pulmonary emphysema	125	45
Rhinotracheitis	34	8
Shipping fever	318	42
Urolithiasis	62	42
Vibriosis	81	
Virus diarrhea	11	5
SHEEP:	11	3
Enterotoxemia	20	,
SWINE:	20	4
Atrophic rhinitis	1	
Erysipelas	1	1
Scabies	13	4
ORSES:	30	1
Distemper	/ 7	
Encephalomyelitis	47	15
Influenza	2	2
OGS:	13	8
Distemper	00	
Infectious hepatitis.	90	68
Leptospirosis	4	4
population to	1	1
TOTAL CASES AND HERDS	1423	517

MONTANA VETERINARIAN'S ANIMAL DISEASE REPORT

INDEX OF COUNTIES

NO.	COUNTY	NO.	COUNTY	NO.	COUNTY
1	Silverbow	20	₩alley	30	Fallon
2	Cascade	21	Toole	40	Sweet Grass
3	Yellowstone	22	Big Horn	41	McCone
4	Missoula	23	Musselshell	42	Carter
5	Lewis & Clark	24	Blaine	43	Broadwater
6	Gallatin	25	Madison	44	Wheatland
7	Flathead	26	Pondera	45	Prairie
8	Fergus	27	Richland	46	Granite
9	Powder River	28	Powell	47	Meagher
10	Carbon	29	Rosebud	48	Liberty
11	Phillips	30	Deer Lodge	49	Park
12	Hi11	31	Teton	50	Garfield
13	Ravalli	32	Stillwater	51	Jefferson
14	Custer	33	Treasure	52	Wibaux
15	Lake	34	Sheridan	53	Golden Valley
16	Dawson	35	Sanders	54	Mineral
17	Roosevelt	36	Judith Basin	55	Petroleum
18	Beaverhead	37	Daniels	56	Lincoln
19	Chouteau	38	Glacier		



EXCERPTS AND SUMMARIES OF CHANGE IN PROGRAMS OF REGULATIONS AFFECTING MOVEMENT OF LIVESTOCK

COLORADO - Cattle - Brucellosis Import Regulations

A. MODIFIED CERTIFIED AREA

All females and bulls 6 months of age and over, shall originate from herds not known to be infected with Brucellosis and shall be negative to an official Brucellosis test within 30 days of importation. Results of the test must be recorded on an official health certificate.

EXCEPTIONS:

- Cattle originating directly from a certified Brucellosis free herd with herd number and date of last herd test shown on the official health certificate.
- Cattle originating directly from herd not under quarantine in a certified free area.
- Official Brucellosis calfhood vaccinated heifers of beef breeds under 24 months of age and dairy breeds under 20 months of age, provided they are not parturient (springers) or post-parturient. Vaccination identification must be legible.
- Cattle for immediate slaughter, if consigned directly to a state
 or federally approved packing plant. Should be identified at
 slaughter establishment, unless lot numbers are maintained so
 trace can be made.
- 5. Cattle consigned to an approved market to be sold for immediate slaughter, to approved feedlots, or to be tested and negative for Brucellosis. They are to be accompanied by a waybill or certificate signed by the owner or shipper stating the origin and destination, address of owner and number and description of animals. Further, each animal is to be identified at origin with official market cattle backtags, or, identified with such tags at time of unloading at the market. These tags must remain on the animals at the sale and serve as identification on those going direct to slaughter.
- 6. Cattle moving direct to a Colorado State-approved feedlot.

B. NON-MODIFIED CERTIFIED AREA

All females and bulls from areas not modified certified shall meet the minimum requirements spelled out in the Uniform Methods and Rules for Brucellosis Eradication. They must originate from qualfied herds(herds with a complete negative test within the past 12 months) and a test of the animals moving within 30 days of movement; or they can move direct to slaughter, or direct to a quarantine feedlot and identified.

ADOPTED BY THE COLORADO AGRICULTURE COMMISSION NOVEMBER 15, 1974.

NEBRASKA - Cattle Import Requirements for Brucellosis

Further clarification of items #5 and #6 which was reported in For Your Information, Issue 7-74.

- Heifers of the beef breeds under eighteen (18) months of age may enter for feeding purposes only by meeting one of the following:
 - a. Either by permit and health certificate. The health certificate is to bear the permit number and an accurate count and description of the animals covered.
 - b. Or, consigned to an approved market in Nebraska.
- 6. All imported <u>market test cattle</u> moving directly from farm or ranch to an approved market in Nebraska must have a negative test within the previous thirty (30) days, or be tested at the market prior to sale, or be sold for slaguhter only. Market test cattle are not to move from market to market without a negative test performed at point of first concentration or tested negative within previous thirty (30) days.

(END)